

Move

Text Search

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(FILE 'USPAT' ENTERED AT 15:09:31 ON 19 AUG 93)

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SET PAGELENGTH 62
SET LINELENGTH 78
L1      211 S OBJECT ORIENTED
L2      64 S L1 AND DISTRIBUTED
L3      45 S L2 AND MESSAGE
L4      10839 S S2 NOT S3
L5      19 S L2 NOT L3
L6      28 S OBJECTIVE C
L7      2181 S MACH AND SYSTEM
L8      67 S L7 AND MESSAGE?
L9      48 S L8 AND OPERATING
L10     3015 S DISTRIBUTED (3A) SYSTEM
L11     1494 S L10 AND COMPUTER
L12     1119 S L10 AND MESSAGE?
L13     844 S L12 AND OBJECT?
L14     824 S L13 NOT L1
L15     660 S L14 AND OPERATING
L16     537 S L15 AND C
L17     389 S L16 AND LOCAL
L18     266 S L17 AND REMOTE
L19     266 S L18 AND PROCESS?
L20     247 S L19 AND COMPUTER?
L21     2 S L20 AND PROXY
L22     86 S PROXY

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(FILE 'USPAT' ENTERED AT 15:09:31 ON 19 AUG 93)

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SET PAGELENGTH 62
SET LINELENGTH 78
L1      211 S OBJECT ORIENTED
L2      64 S L1 AND DISTRIBUTED
L3      45 S L2 AND MESSAGE
L4      10839 S S2 NOT S3
L5      19 S L2 NOT L3
L6      28 S OBJECTIVE C
L7      2181 S MACH AND SYSTEM
L8      67 S L7 AND MESSAGE?
L9      48 S L8 AND OPERATING
L10     3015 S DISTRIBUTED (3A) SYSTEM
L11     1494 S L10 AND COMPUTER
L12     1119 S L10 AND MESSAGE?
L13     844 S L12 AND OBJECT?
L14     824 S L13 NOT L1
L15     660 S L14 AND OPERATING
L16     537 S L15 AND C
L17     389 S L16 AND LOCAL
L18     266 S L17 AND REMOTE
L19     266 S L18 AND PROCESS?
L20     247 S L19 AND COMPUTER?
L21     2 S L20 AND PROXY
L22     86 S PROXY

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INPUT: 


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is established, so that a file reference by the remote process at the serving computer addresses a file located at the requesting computer. The remote process is activated at the serving computer in response to the remote process execution request. In response to a file reference by the remote process, the file is automatically accessed from the requesting computer in accordance with the addressing structure. The method includes a technique by means of which files may be selectively and automatically accessed from either the requesting or the serving computer, as desired by a user. A computer administrator may selectively override the file accessing instructions, if desired, thereby providing the ability to maintain file security for certain files.

US PAT NO: 4,649,473 [IMAGE AVAILABLE]

L16: 76 of 89

## ABSTRACT:

An interprocess data transfer facility provides transfer of data between two processes. Work requests are represented by notes that are placed on a queue of a server process for performing the work. The requestor process which created a work request does not transfer the work request from storage it controls until requested by the server. The actual transfer of the work request occurs without interaction of the requestor. The use of notes which

14:29:06 COPY AND CLEAR PAGE, PLEASE

US PAT NO: 4,649,473 [IMAGE AVAILABLE]

L16: 76 of 89

represent the work requests permits complex queueing of notes and hence handling of the requests in the order desired by the server.

=&gt; d 2,64

2. 5,230,051, Jul. 20, 1993, Distributed messaging system and method; Suu Quan, 395/700; 364/241.7, 242.5, 242.94, DIG.1 [IMAGE AVAILABLE]

64. 4,825,354, Apr. 25, 1989, Method of file access in a distributed processing computer network; Rakesh Agrawal, et al., 395/600; 364/230.6, 236.2, 242.94, 242.96, 256.8, 264, 264.6, 271, 271.3, 271.5, 280, 280.4, 281.3, 281.7, 281.8, 282.1, 282.3, 282.4, 283.1, 283.2, 286, 286.1, 286.4, 286.5, DIG.1 [IMAGE AVAILABLE]

=&gt; d his

(FILE 'USPAT' ENTERED AT 13:25:40 ON 23 AUG 93)

L1 12 S 4694396  
 L2 16 S WEISSHAAR  
     SET PAGELENGTH 62  
     SET LINELENGTH 78  
 L3 1 S 4694396/PN  
 L4 344 S MESSAGE? (A) PASSING?  
 L5 337 S L4 AND PROCESS?  
 L6 272 S L5 AND OBJECT?  
 L7 237 S MESSAGE PASSING  
 L8 235 S L7 AND PROCESS?  
 L9 182 S L8 AND OBJECT  
 L10 101 S L9 AND REMOTE  
 L11 92 S L10 AND COMPUTER?  
 L12 48 S L11 AND ORIENTED  
 L13 44 S L11 NOT L12  
 L14 9 S L10 NOT L11  
 L15 81 S L9 NOT L10  
 L16 89 S INTER PROCESS

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INPUT: 


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3/9/1 (Item 1 from file: 2)

03667786 INSPEC Abstract Number: C90047322

*requested*

Title: The design of a distributed object-oriented operating system for office applications

Author(s): Shapiro, M.

Author Affiliation: INRIA, Le Chesnay, France

Conference Title: ESPRIT '88. Putting the Technology to Use. Proceedings of the 5th Annual ESPRIT Conference p.1020-7 vol.2

Publisher: North-Holland, Amsterdam, Netherlands

Publication Date: 1988 Country of Publication: Netherlands 2 vol. xxiii+1759 pp.

ISBN: 0 444 87145 4

Conference Date: 14-17 Nov. 1988 Conference Location: Brussels, Belgium

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: SOS is an object-oriented, distributed operating system, designed for Esprit project 367 SOMIW. It is designed to support well-encapsulated, autonomous, distributed domains. This is done by the proxy mechanism: a proxy is a local object representing some distributed service. Migrating proxies allows access to new services to be acquired and the extent of a domain to be dynamically charged. The proxy mechanism allows a uniform view of all structures: local, remote, or distributed. It is extremely flexible. The paper reports preliminary experience with the SOS operating system based on these ideas, and discusses some open problems. (24 Refs)

Descriptors: distributed processing; object-oriented programming; office automation; operating systems (computers)

Identifiers: distributed object-oriented operating system; office applications; SOS; Esprit project 367; SOMIW; proxy mechanism; local object ; distributed service

Class Codes: C6150J (Operating systems); C7104 (Office automation)

3/9/2 (Item 2 from file: 2)

03494397 INSPEC Abstract Number: C89068231

*requested*

Title: Object monitor for a distributed object-oriented system

Author(s): Valot, C.

Issued by: Inst. Nat. Recherche Inf. Autom., Le Chesnay, France

Publication Date: March 1989 Country of Publication: France 25 pp.

Report Number: 985

Language: French Document Type: Report (RP)

Treatment: Practical (P)

Abstract: SOS is a general-purpose, object-oriented distributed operating system allowing the execution of distributed applications of different kinds. The SOS operating system is object-oriented and based on the Proxy Principle. Entities are encapsulated and accessible by well-defined interfaces. The object monitor is in charge of observing the objects life and evolution within address spaces. The goal was to ease debugging of SOS programs. The construction of this tool has highlighted some problems of the SOS operating system. (19 Refs)

Descriptors: network operating systems; object-oriented programming; software tools

Identifiers: Unix; object-oriented distributed operating system; distributed applications; SOS operating system; Proxy Principle; address spaces

Class Codes: C6150J (Operating systems); C6115 (Programming support)

3/9/3 (Item 3 from file: 2)

03450993 INSPEC Abstract Number: C89056737

Title: The SOS Object-oriented communication service  
Author(s): Makpangou, M.; Shapiro, M.  
Author Affiliation: INRIA, Le Chesnay, France  
Conference Title: Computer Communication Technologies for the 90's.  
Proceedings of the Ninth International Conference p.207-12

Editor(s): Raviv, J.  
Publisher: North-Holland, Amsterdam, Netherlands  
Publication Date: 1988 Country of Publication: Netherlands xvi+606 pp.

Conference Sponsor: IEEE; Int. Council for Comput. Commun.; Inf. Process.

Assoc

Conference Date: 30 Oct.-3 Nov. 1988 Conference Location: Tel Aviv, Israel

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: SOS is a general-purpose, object-oriented distributed operating system, based on the proxy principle. Its communication service provides flexible communication mechanisms for executing distributed applications with conflicting requirements, especially with respect to the speed/reliability trade-off (e.g. multimedia document access, real-time voice transfer, moving images, and reliable office activities). These mechanisms must be efficient, to encourage development of distributed applications. Furthermore, each application should only pay the price of those mechanisms it really uses. The SOS communication service provides reliable and unreliable, unicast and multicast invocation protocols. The unreliable protocols incur no reliability-related overhead. All the invocation-level protocols are multiplexes on a single host-to-host transport channel. The object-oriented approach permits a progressive construction of the set of necessary invocation protocols, with great re-use of code and design. (12 Refs)

Descriptors: distributed processing; operating systems (computers); protocols

Identifiers: Somiw operating system; object-oriented distributed operating system; proxy principle; communication service; flexible communication mechanisms; multimedia document access; real-time voice transfer; moving images; invocation protocols; code; design

Class Codes: C6150J (Operating systems)

3/9/4 (Item 4 from file: 2)

03450330 INSPEC Abstract Number: C89056199

Title: Programmer's manual for SOS Prototype - Version 4

Issued by: Inst. Nat. Recherche Inf. Autom., Le Chesnay, France

Publication Date: Dec. 1988 Country of Publication: France 90 pp.

Report Number: 103

Language: English Document Type: Report (RP)

Treatment: Practical (P)

Abstract: This is a programmer's manual for SOS Prototype Version 4. It contains the necessary information to program SOS objects, in their different roles (proxies, proxy-providers, and servers); how to prepare, export, or import proxies; how to prepare code objects; and how to compile. It contains the information on how to interface to the dynamic linker and to system services. This information is exposed in a compact form, by example; the reader is expected to have previous knowledge of C++ and of the principles of the SOS design. (10 Refs)

Descriptors: C language; data structures; program compilers; programming; programming environments; Unix; user manuals

Identifiers: user manuals; programming; Unix; data structures; programming environments; SOS Prototype Version 4; SOS objects; dynamic linker; system services; C++

Class Codes: C6110 (Systems analysis and programming); C6115 (

Programming support); C620 (File organisation); C10D (High level languages)

3/9/5 (Item 5 from file: 2)  
03218350 INSPEC Abstract Number: B88059457, C88052688  
Title: SOS object - oriented communication service  
Author(s): Makpangou, M.; Shapiro, M.  
Issued by: Inst. Nat. Recherche Inf. Autom., Le Chesnay, France  
Publication Date: March 1988 Country of Publication: France 15 pp.  
Report Number: 801  
Language: English Document Type: Report (RP)  
Treatment: Practical (P)

Abstract: SOS is a general-purpose, object-oriented distributed operating system, based on the proxy principle. The SOS Communication Service provides flexible communication mechanisms for executing distributed applications with conflicting requirements (e.g. multimedia document access, real-time voice transfer, moving image, and reliable office activities), especially with respect to the speed/reliability trade-off. These mechanisms must be efficient enough to encourage development of distributed applications. Furthermore, each application should only pay the price of those mechanisms it really uses. The SOS Communication Service provides both reliable and unreliable communication; unreliable communication incurs no reliability-related overhead. Both unicast and multicast communication are provided. All of these are multiplexed on a single host-to-host transport channel. The object-oriented design allows progressive construction of the invocation-level protocols, with extensive re-use of code and design. (15 Refs)

Descriptors: distributed processing; network operating systems; protocols; telecommunication services

Identifiers: general purpose operating system; office automation; object-oriented distributed operating system; proxy principle; SOS Communication Service; distributed applications; multimedia document access; real-time voice transfer; moving image; multiplexed; transport channel; invocation-level protocols; code

Class Codes: B6210 (Telecommunication applications); B6210 (Telecommunication applications); C5620 (Computer networks and techniques); C6150J (Operating systems); C6155 (Computer communications software)

3/9/6 (Item 6 from file: 2)  
03185825 INSPEC Abstract Number: C88046640  
Title: Distributed electronic conference and port of a dynamic link editor under SOS

Author(s): Gourhant, Y.  
Issued by: Inst. Nat. Recherche Inf. Autom., Le Chesnay, France  
Publication Date: Jan. 1988 Country of Publication: France 47 pp.  
Report Number: 785  
Language: French Document Type: Report (RP)  
Treatment: Practical (P)

Abstract: The author discusses the realization of a distributed electronic conference, on top of SOS. He exposes problems related to multi-user situations. The goal of this application was to test the distribution support mechanisms, provided by the first version of SOS. It was also an example of an application, structured using the Proxy Principle. This realization established the lack of certain functionalities, fixed and provided by the second version of SOS. The second part of the report concerns the dynamic link editor and its adaptation to the Unix System V COFF format. This work is the first step to the port of SOS to the target machine. (29 Refs)

Descriptors: distributed processing; operating systems (computers); teleconferencing

SYSTEM:OS - DIALOG OneSearch  
File 2:INSPEC 2 1969-1993/AUG W4  
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File 6:NTIS 1964-1993/Sep B2  
(c) 1993 NTIS

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Call NTIS at 703/487-4650 to order.

File 8:Ei Compendex\*Plus(TM) 1970-1993/Sep W4  
(c) 1993 Engineering Info. Inc.

\*\*FILE008: Weekly updates are now available in Ei Compendex\*Plus!  
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File 35:DISSERTATION ABSTRACTS ONLINE 1861-AUG 93  
(Copr University Microfilms)

File 350:Derwent World Patents Index  
1963-1980, EQUIVALENTS THRU DW=9320

\*\*FILE350: Format 9 includes the expanded patent table. Preformatted  
REPORTs are available. Type ?FMT350, ?NEWS350, ?RATES350 for more info.

File 351:DERWENT WORLD PATENTS INDEX-LATEST  
1981+;DW=9326,UA=9319,UM=9248

\*\*FILE351: Attention Derwent subscribers: Markush DARC on DIALOG is  
available. Begin WPILM to access.

Set Items Description

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Set Items Description  
S1 72925 ENCOD?  
S2 64601 DECOD?  
S3 162547 REMOTE  
S4 1311 PROXY  
S5 12056 S1 AND S2  
S6 505 S3 AND S5  
S7 0 S4 AND S5  
S8 17 S3 AND S4  
S9 16 RD S8 (unique items)

?t 9/7/1-16

9/7/1 (Item 1 from file: 2)  
4460725 INSPEC Abstract Number: A9318-9410-002  
Title: Observations of atomic deuterium in the mesosphere from ATLAS 1  
with ALAE instrument  
Author(s): Bertaux, J.-L.; Quemerais, E.; Goutail, F.; Kockarts, G.;  
Sandel, B.  
Author Affiliation: Service d'aeronomie du CNRS, Verrieres le Buisson,  
France  
Journal: Geophysical Research Letters vol.20, no.6 p.507-10  
Publication Date: 19 March 1993 Country of Publication: USA  
CODEN: GPRLAJ ISSN: 0094-8276  
U.S. Copyright Clearance Center Code: 0094-8276/93/93GL-00077\$03.00  
Language: English Document Type: Journal Paper (JP)  
Treatment: Practical (P), Experimental (X)  
Abstract: During the first ATLAS mission, the ALAE Lyman alpha  
spectrophotometer collected various measurements of hydrogen and deuterium  
atoms. This paper presents a preliminary analysis of some observations of  
atomic deuterium based on Lyman alpha emission excited by resonance  
scattering of solar photons. Nadir measurements along the sunlit Earth part  
of the orbit show that the emission changes as a function of solar zenith  
angle. Comparison with a simple model shows that from the Shuttle altitude

of 300 km and at low solar zenith angles, the line-of-sight probes atomic deuterium down to 80 km of altitude (where  $0_{\text{sub}} 2$  absorption is complete), whereas at angles from 60 degrees to 90 degrees, the mesospheric part of the emission progressively vanishes. Then, the remaining emission mainly consists of the thermospheric part ( $z > 100$  km). This type of observation provides a sounding of atomic deuterium at its peak production and concentration, and D atoms can be used as a proxy for H atoms in this particularly active region of the mesosphere. (9 Refs)

9/7/2 (Item 2 from file: 2)  
04381580 INSPEC Abstract Number: A9310-9240-005, B9305-7710D-008  
Title: Interpretation of SAR imagery of the Greenland ice sheet using coregistered TM imagery

Author(s): Bindschadler, R.; Vornberger, P.

Author Affiliation: NASA/Goddard Space Flight Center, Greenbelt, MD, USA

Journal: Remote Sensing of Environment vol.42, no.3 p.167-75

Publication Date: Dec. 1992 Country of Publication: USA

CODEN: RSEEA7 ISSN: 0034-4257

U.S. Copyright Clearance Center Code: 0034-4257/92/\$5.00

Language: English Document Type: Journal Paper (JP)

Treatment: Experimental (X)

Abstract: Landsat Thematic Mapper (TM) images are coregistered with a Seasat Synthetic Aperture Radar (SAR) image of the margin of the Greenland ice sheet and used in the interpretation of features in the SAR data. A winter TM image is used to provide topographic information while a summer TM image provides information on the pattern of melt and the location of lakes. The snow line is easily detectable in SAR imagery; areas of higher radar backscatter in the bare-ice zone correspond to areas full of crevasses too small to resolve in the SAR image; subsurface scattering causes blurring of features in SAR imagery; the band of surface lakes occurring above the snow line corresponds to a portion of the wet-snow zone water is the cause of reduced radar backscatter above the snow line; and backscatter variations can be used as a proxy indicator of surface topography in snow-covered regions experiencing melt. (14 Refs)

9/7/3 (Item 3 from file: 2)  
04319795 INSPEC Abstract Number: A9304-9260-068  
Title: The use of infrared satellite cloud imagery data as proxy data for moisture and diabatic heating in data assimilation

Author(s): Puri, K.; Davidson, N.E.

Author Affiliation: Bur. of Meteorol. Res. Centre, Melbourne, Vic., Australia

Journal: Monthly Weather Review vol.120, no.10 p.2329-41

Publication Date: Oct. 1992 Country of Publication: USA

CODEN: MWREAB ISSN: 0027-0644

U.S. Copyright Clearance Center Code: 0027-0644/92/\$4.25+0.25

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P); Theoretical (T)

Abstract: Geostationary and polar-orbiting satellites can provide useful proxy sources of moisture data and diabatic heating. It is shown that the use of this information during data assimilation leads to improved precipitation in the tropics and has the potential to minimize spinup in the model. Furthermore, the use of moisture initialization leads to improved agreement between the model and observed precipitation during the early stages of model integration. (22 Refs)

9/7/4 (Item 4 from file: 2)  
03667786 INSPEC Abstract Number: C90047322  
Title: The design of a distributed object-oriented operating system for office applications

tasks communicating via messages. If the compiler has enough information, this translation can be carried out at compile-time. Otherwise run-time code is generated to implement the required data movement. The analysis required in both situations is described and the performance of the generated code on the Intel iPSC/2 is presented.

23/7/8 (Item 3 from file: 6)

1224874 NTIS Accession Number: TIB/B86-80339/XAB

Class of Fault-Masking Protocols with Reduced Redundant Communication  
Echtle, K.

Karlsruhe Univ. (Germany, F.R.). Fakultaet fuer Informatik.

Corp. Source Codes: 033183059

Report No.: REPT-18/85

17 Sep 85 25p

Languages: English

Journal Announcement: GRAI8703

NTIS Prices: PC E07

Country of Publication: Germany, Federal Republic of

Fault-masking in distributed systems is usually achieved by triplication of all processes and insertion of majority-voters. If a single-fault is assumed in any component, the masking of interprocess-communication between process-triples requires one voter for each process of the receiver triple, as well as interprocess-message-transfer from each sender process to each receiver process, thus causing a 9-fold communication expense. This paper introduces a fault-masking protocol, which under certain conditions reduces the communication overhead to a configuration-dependant average number of 0 up to 3 interprocess-messages. This protocol belongs to the class of m-protocols, where m stands for the number of interprocess-messages m instead of m2 in usual n-out-of-m-systems. m-protocols are characterized by masking faults before transferring interprocess-messages, using a distributed subsystem as voter, combining static redundant processing with dynamic redundant message transfer, and using signature analysis and encryption procedures. The protocol presented here is shown to cause the minimal worst-case communication overhead within the class of m-protocols for m=3. (Copyright (c) 1986 by FIZ. Citation no. 86:80339.)

23/7/9 (Item 1 from file: 8)

02348329 E.I. Monthly No: EIM8711-074152

Title: ON THE VLSI REALIZATION OF COMPLEX INSTRUCTION SETS USING  
RISC-LIKE COMPONENTS.

Author: Ghose, Kanad

Corporate Source: Iowa State Univ, Ames, IA, USA

Conference Title: 1987 Proceedings - Fourth International IEEE VLSI  
Multilevel Interconnection Conference.

Conference Location: Santa Clara, CA, USA Conference Date: 1987 Jun  
15-16

Sponsor: IEEE Electron Devices Soc, New York, NY, USA

E.I. Conference No.: 10238

Source: Publ by IEEE, New York, NY, USA. Available from IEEE Service Cent  
(Cat n 87CH2488-5), Piscataway, NJ, USA p 88-91

Publication Year: 1987

Language: English

Document Type: PA; (Conference Paper)

Journal Announcement: 8711

Abstract: Reduced instruction set computers (RISCs) utilize the VLSI chip area more effectively and can outperform complex instruction set computers (CISCs). The authors distribute the processing requirements of a capability-based CISC, oriented toward high-level languages and operating systems, over a number of microprogrammed VLSI coprocessors having RISC-like area-efficient architecture with on-chip cache and address

Author(s): Shapiro, M.  
Author Affiliation: INRIA, Le Chesnay, France  
Conference Title: ESPRIT '88. Putting the Technology to Use. Proceedings  
of the 5th Annual ESPRIT Conference p.1020-7 vol.2  
Publisher: North-Holland, Amsterdam, Netherlands  
Publication Date: 1988 Country of Publication: Netherlands 2 vol.  
xxiii+1759 pp.  
ISBN: 0 444 87145 4  
Conference Date: 14-17 Nov. 1988 Conference Location: Brussels,  
Belgium  
Language: English Document Type: Conference Paper (PA)  
Treatment: Practical (P)  
Abstract: SOS is an object-oriented, distributed operating system,  
designed for Esprit project 367 SOMIW. It is designed to support  
well-encapsulated, autonomous, distributed domains. This is done by the  
proxy mechanism: a proxy is a local object representing some distributed  
service. Migrating proxies allows access to new services to be acquired and  
the extent of a domain to be dynamically changed. The proxy mechanism  
allows a uniform view of all structures: local, remote, or distributed. It  
is extremely flexible. The paper reports preliminary experience with the  
SOS operating system based on these ideas, and discusses some open  
problems. (24 Refs)

9/7/5 (Item 5 from file: 2)  
03663690 INSPEC Abstract Number: A90097235  
Title: Sources of variability in satellite-derived estimates of  
phytoplankton production in the eastern tropical Pacific

Author(s): Banse, K.; Yong, M.  
Author Affiliation: Sch. of Oceanogr., Washington Univ., Seattle, WA, USA  
Journal: Journal of Geophysical Research vol.95, no.C5 p.7201-15  
Publication Date: 15 May 1990 Country of Publication: USA  
CODEN: JGREA2 ISSN: 0148-0227  
U.S. Copyright Clearance Center Code: 0148-0227/90/89JC-03526\$05.00  
Language: English Document Type: Journal Paper (JP)  
Treatment: Bibliography (B); Experimental (X)  
Abstract: As a proxy for satellite observations and concurrent  
measurements of primary production rates, data from 138 stations occupied  
seasonally during 1967-8 in the offshore, eastern tropical Pacific were  
analyzed in terms of six temporal groups and four current regimes. In  
multiple linear regressions on column production  $P_{sub t}$ , simulated  
satellite pigment is generally weakly correlated. With  $P_{sub t}$ , and  
incident irradiance, sea surface temperature, nitrate, transparency, and  
depths of mixed layer or nitracline assume little or no importance. After a  
proxy for the light-saturated chlorophyll-specific photosynthetic rate  
 $P_{sub max}$  is added, the coefficient of determination ( $r^{sup 2}$ ) ranges  
from 0.55 to 0.91 for the 10 cases. In stepwise multiple linear regressions  
the  $P_{sub max}$  proxy is the best predictor for  $P_{sub t}$ .  $P_{sub t}$  can be  
calculated fairly accurately from the satellite pigment, the 10% light  
depth, and station values of the  $P_{sub max}$  proxy. At present,  $P_{sub max}$   
cannot be estimated from space; therefore extant models for calculating  
 $P_{sub t}$  in this tropical ocean have inherent limits of accuracy. (70  
Refs)

9/7/6 (Item 6 from file: 2)  
03134064 INSPEC Abstract Number: A88071171  
Title: Observed relationships between large-scale tropical convection and  
the tropical circulation on subseasonal time scales during Northern  
Hemisphere winter  
Author(s): Liebmann, B.  
Author Affiliation: Dept. of Atmos. Sci., Washington Univ., Seattle, WA,

USA

Journal: Journal of the Atmospheric Sciences vol.44, no.18 p.

2543-61

Publication Date: 15 Sept. 1987 Country of Publication: USA

CODEN: JAHSAK ISSN: 0022-4928

U.S. Copyright Clearance Center Code: 0022-4928/87/\$4.25+0.25

Language: English Document Type: Journal Paper (JP)

Treatment: Experimental (X)

Abstract: Presents a correlative study of the interaction between large-scale tropical convection and midlatitude wind anomalies, and the tropical wind field on subseasonal time scales. Outgoing longwave radiation (OLR) is used as a proxy for convection. Correlations are calculated from six years of 5-day averaged data for the December-February season. The seasonal cycle and interannual variability are removed before computing the correlations. The results show that it is appropriate to classify the tropics into two regimes based on the direction of the time-mean 20-mb zonal wind at the equator. The results imply that convection is an important determinant of time-mean flow asymmetries along the equator. One-point correlation maps are presented for OLR anomalies at the equator at 130 degrees E correlated with the near global field of nondivergent and divergent wind at 200 and 850 mb. These results are compared with the output from a linear model which was forced with an idealized heat source.

(34 Refs)

9/7/7 (Item 7 from file: 2)

03066702 INSPEC Abstract Number: C88013799

Title: Collection of papers on the distributed object-oriented operating system SOS

Author(s): Shapiro, M.; Abrossimov, V.; Gautron, P.; Habert, S.; Makpangou, M.

Issued by: Inst. Nat. Recherche Inf. Autom., Le Chesnay, France

Publication Date: May 1987 Country of Publication: France 80 pp.

Report Number: 84

Language: French Document Type: Report (RP)

Treatment: Practical (P)

Abstract: SOS or the SOMIW operating system is a distributed object-oriented operating system project within Esprit n degrees 367 SOMIW ('secure open multimedia integrated workstation', an integrated multimedia office work environment). In SOS, communication is based on the proxy concept. A proxy is an object which represents, locally, some service implemented by a remote or distributed object. This collection includes the following titles: SOS programmer's manual, SOS: a distributed object-oriented operating system, a dynamic link editor for C++, on the use of the dynamic link editor; and exception handling in C++ programs.

9/7/8 (Item 8 from file: 2)

01246370 INSPEC Abstract Number: A78073489, B78044273

Title: Airborne lidar aerosol measurements during the ASSESS II mission

Author(s): Werner, C.; Bachstein, F.; Dietz, S.; Herrmann, H.; Kopp, F.; Löffler, H.

Author Affiliation: DFVLR Inst. of Atmospheric Phys., Oberpfaffenhofen, West Germany

Journal: Review of Scientific Instruments vol.49, no.7 p.974-81

Publication Date: July 1978 Country of Publication: USA

CODEN: RSINAK ISSN: 0034-6748

Language: English Document Type: Journal Paper (JP)

Treatment: Experimental (X)

Abstract: During May 1977 the Airborne Science Spacelab Experiments System Simulation (ASSESS II) took place, using the NASA CV 990 aircraft. A Nd:glass lidar system, measuring the aerosol mass concentration over large

areas, was proxy operated by trained 'Payload Specialists'. The main part of this paper is concerned with the lidar experiment and its results. The participants in the mission viewed it as a tool for judging their Spacelab science management and as the final stage of a guide for future planning of experiments. A general result has emerged is that, for a real Spacelab mission, the handling of remote sensing experiments should be fully automatic. (15 Refs)

9/7/9 (Item 9 from file: 2)

01234730 INSPEC Abstract Number: A78069649, B78040445

Title: Results of the ASSESS II Spacelab simulation mission

Author(s): Werner, C.

Journal: Laser und Elektro-Optik vol.10, no.1 p.9-13

Publication Date: March 1978 Country of Publication: West Germany

CODEN: LELOAA ISSN: 0344-5186

Language: German Document Type: Journal Paper (JP)

Treatment: Experimental (X)

Abstract: During May 1977 the Airborne Science Spacelab Experiment System Simulation (ASSESS II) using the NASA aircraft took place. The Nd:glass lidar system measuring the aerosol mass concentration over large areas was proxy operated by trained 'Payload Specialists'. The participants in the mission viewed the mission as a tool for judging their Spacelab science management and to complete a guide for future planning of experiments. The general result to emerge is that for a real Spacelab mission the handling of remote sensing experiments should be fully automatic. (4 Refs)

9/7/10 (Item 1 from file: 6)

1602035 NTIS Accession Number: AD-A248 427/7/XAB

Inverted Echo Sounder Telemetry System Report

(Technical rept)

Howden, S. ; Tracey, K. ; Watts, D. R. ; Rossby, H. T.

Rhode Island Univ., Kingston. Graduate School of Oceanography.

Corp. Source Codes: 013987009; 406099

Report No.: GSO-TR-91-8

1991 44p

Languages: English

Journal Announcement: GRAI9214

NTIS Prices: PC A03/MF A01

Country of Publication: United States

Contract No.: N00014-89-J-1919

From August 1989 until August 1990, a simple acoustic telemetry system was used for obtaining real-time data from 5 Inverted Echo Sounders (IESs) deployed in the SYNOP inlet array in the Gulf Stream east of Cape Hatteras. Every 24 hours, each IES calculated a representative travel time from a set of 48 measurements ( $T_r$ ), and telemetered that value to a listening station on Bermuda. From the received data, a daily time series of the depth of the 12°C isotherm (our proxy for main thermocline depth) over each IES was calculated. The position of the Gulf Stream North Wall through the IES array was calculated on a daily basis from the thermocline depth information at each IES site. The telemetry system is based on encoding data as a time delayed broadcast acoustic signal: the delay of the time of broadcast of the signal, with respect to a reference time, is proportional to the data value. The changes in delay time, from one broadcast signal to the next, are recorded at a remote receiving station. The IESs were recovered in August 1990, with the exception of the one at site B2. The telemetered data from the IES at site B2 was, however, received at Bermuda. The RMS agreement between thermocline depths, as calculated from the data on tape from the recovered IESs and as calculated from the received telemetry data, is 20 m. This compares favorably with the 19 m uncertainty in calibrating the  $T_r$  as a measure of the thermocline depth.

9/7/11 (Item 2 from file: 6)  
1589189 NTIS Accession Number: N92-15507/6/XAB  
Report of Meeting of Experts on Climate Change Detection Project  
(World Climate Data Programme)  
World Meteorological Organization, Geneva (Switzerland).  
Corp. Source Codes: 017802000; W7131835  
Sponsor: National Aeronautics and Space Administration, Washington, DC.  
Report No.: WCDP-13; WMO/TD-418  
Nov 90 107p  
Languages: English Document Type: Conference proceeding  
Journal Announcement: GRAI9209; STAR3006  
Meeting Held in Niagara-on-the-Lake, 26-30 Nov. 1990.  
NTIS Prices: PC A06/MF A02  
Country of Publication: Other  
An account is given of research on climate change detection that was presented at a meeting of experts. Topics covered included climate prediction model validation, the importance of using more remote sensing data in model validations and climate change detection, current modeling activities at the Canadian Climate Center (CCC), the coupling of an upper ocean circulation model to the CCC general circulation model (GCM), the coupling of a version of the Cox-Byran ocean GCM to the CCC GCM, the monitoring of sea surface temperature and salinity at 18 sites around the Canadian coast, a statistical study of the 95 year record of in-situ meteorological data in the northern mid-west of the United States, and the use of proxy data records for climate change detection.

9/7/12 (Item 3 from file: 6)  
1250220 NTIS Accession Number: DE87004503/XAB  
Lake Ice Occurrence as an Early Detector of Climate Perturbation: The Potential for Monitoring: Final Report

Barry, R. G.

Cooperative Inst. for Research in Environmental Science, Boulder, CO.

Corp. Source Codes: 032990000; 9500876

Sponsor: Department of Energy, Washington, DC.

Report No.: DOE/ER/60106-5

Jan 87 29p

Languages: English

Journal Announcement: GRAI8714; NSA1200

NTIS Prices: PC A03/MF A01

Country of Publication: United States

Contract No.: AC02-83ER60106

The utility of using records of lake freeze-up/break-up as a proxy indicator of transition season temperatures was investigated. Data for lakes and nearby meteorological stations in Canada and Finland were analyzed by simple regression techniques. Typically, a 3 to 10 day change in freeze-up/break-up date corresponds to a 1<sup>sup</sup> 0 C change in surface air temperature of the same sign during fall/spring, respectively. The spring relationships are less strong due to other hydro-meteorological factors, but the regression equations remain consistent. Application of such a regression relationship for lakes in southern Finland to a 150-year record of break-up/freeze-up at Lake Kallavesi shows a good fit to observed November and April temperature trends at Helsinki. The feasibility of monitoring lake ice conditions using operational satellite data was also studied by analyzing visible band DMSP images for Canada and Finland. In both regions, extensive fall season cloud cover and difficulties in discriminating dark ice types appear to limit this approach. For spring break-up the satellite-determined dates are generally several days later than the ground observations. Lakes of >40 km<sup>sup</sup> 2 and <800 km<sup>sup</sup> 2 show the most consistent results. The results confirm the value of data on lake

ice conditions as a simple integrating measure of air temperature during transition season months. Large-scale monitoring of spring break-up date, at least, is feasible from operational meteorological satellites and could be used in helping to detect CO<sub>2</sub> sub 2 -induced climatic trends. (ERA citation 12:014208)

9/7/13 (Item 4 from file: 6)

848747 NTIS Accession Number: PB81-198764

The Interim Climate Data Inventory: A Quick Reference to Selected Climate Data

Ropelewski, C. F. ; Predoehl, M. C. ; Platvo, M.  
National Oceanic and Atmospheric Administration, Washington, DC.  
Environmental Data and Information Service.

Corp. Source Codes: 031813056

Report No.: NOAA-81030201

Dec 80 180p

Languages: English

Journal Announcement: GRAI8118

NTIS Prices: PC A09/MF A01

Country of Publication: United States

This catalog was produced as part of the efforts of the Environmental Data and Information Service (EDIS) in the National Climate Program. Its primary purpose is the distribution of information collected at the Climate Data Management Workshop held in Harpers Ferry, West Virginia in May 1979. These are: basic atmospheric data; hydrology, precipitation, snow; ocean data; radiation, physics, and chemistry; proxy and non-instrumental data resources; and geographical, land use, and assessment data.

9/7/14 (Item 1 from file: 8)

03459971 E.I. Monthly No: EI9207-038770

Title: Optical extinction and microwave scattering within a seasonally varying snow covered sea ice surface.

Author: Barber, David G.; De Abreu, Roger; LeDrew, Ellsworth F.

Conference Title: 1991 International Geoscience and Remote Sensing Symposium - IGARSS'91

Conference Location: Espoo, Finl Conference Date: 1991 Jun 3-6

Sponsor: IEEE Geoscience & Remote Sensing Soc; Int Union of Radio Science  
E.I. Conference No.: 16371

Source: Digest - International Geoscience and Remote Sensing Symposium (IGARSS) v 2. Publ by IEEE, IEEE Service Center, Piscataway, NJ, USA (IEEE cat n 91CH2971-0). p 799-802

Publication Year: 1991

CODEN: IGRSE3 ISBN: 0-87942-675-6

Language: English

Document Type: PA; (Conference Paper) Treatment: T; (Theoretical)

Journal Announcement: 9207

Abstract: A report is presented on the theoretical distinctions between visible and microwave-length interaction within a snow-covered sea ice surface. Empirical models of shortwave (0.4-2.5 μm) extinction are compared with models of microwave (2.4-7.5 cm) penetration. Transmissivity, reflectivity and absorptivity of shortwave radiation are compared with dielectric changes affecting the microwave scattering from the snow-covered ice surface. Results of this comparison are used in developing proxy indicators of climatological albedo and subice photosynthetically active radiation, using active microwave signatures of the seasonally varying snow-covered sea ice surface. Data from the SIMS'90 field experiment are used to validate the theoretical constructs described. 14 Refs.

9/7/15 (Item 2 from file: 8)

00824158 E.I. Monthly No: EI7906046456 E.I. Yearly No: EI79075698

Title: REMOTE SENSING OF PLAYA LAKES AS A SOURCE OF CLIMATIC DATA.

Author: Ebert, James I.

Corporate Source: Univ of NM, Albuquerque

Source: Proc of the Am Soc of Photogramm Fall Tech Meet, Albuquerque, NM, Oct 15-20 1978 Publ by Am Soc of Photogramm, Falls Church, Va, 1978 p 159-175

Publication Year: 1978

Language: ENGLISH

Journal Announcement: 7906

Abstract: The periodic nature, resolution, scanner characteristics, and regional overview provided by Landsat imagery makes it ideally suited to the measurement of playa lake data for purposes of climatic studies. Such imagery can provide the scientist interested in long-term climatic change or in palaeoclimatic and palaeoenvironmental reconstruction with a means for the detection of past playa lakes and the delineation of proxy indicators of past playa lake states. In short-term, near real-time climatic studies, the fluctuation of water surface area and other surface characteristics of playa lakes relevant to their water balance can be measured efficiently and automatically. 29 refs.

9/7/16 (Item 1 from file: 35)

01116301 ORDER NO: AAD90-20515

DENDROCHRONOLOGICAL MODELING AND RECONSTRUCTION OF LARGE-SCALE CLIMATE VARIABILITY IN RECENT CENTURIES AND ITS RELATION TO ATMOSPHERIC FORCING FUNCTIONS

Author: D'ARRIGO, ROSANNE DOROTHY

Degree: PH.D.

Year: 1989

Corporate Source/Institution: COLUMBIA UNIVERSITY (0054)

Source: VOLUME 51/03-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 1162. 224 PAGES

Tree-ring chronologies from boreal treeline and other sites have been used to reconstruct patterns of climate variability, their relationship to known forcing functions, and climate as modeled using these forcings. Northern Hemisphere temperatures reconstructed for the past three hundred years agree with other proxy data and with temperature derived from a radiative-convective model incorporating volcanic, solar and CO<sub>2</sub> forcings. Superposed epoch analysis shows the effects of volcanism on tree growth and spectral analysis indicated periodicities which might be related to solar or other cycles. Comparison of the reconstructed temperatures with recent instrumental records reveals that the temperature departures within the past decade of elevated atmospheric trace gases levels exceed the "natural" variations in the tree-ring data in past centuries.

A CO<sub>2</sub> fertilization effect is not detected in this data through 1973. This issue is further investigated for a high-elevation lodgepole pine site from California. Climate response models indicate that a recent growth increase cannot be completely explained by past climate-growth relationships. The contribution of atmosphere-biosphere CO<sub>2</sub> exchange of boreal forests to Pt. Barrow, Alaska CO<sub>2</sub> amplitudes is found to be significant using a 3-D tracer model which employs an exchange function based on remote sensing photosynthetic indices. Positive correlations between variations in these amplitudes and tree-ring data suggest that tree-rings may be used as indicators of CO<sub>2</sub> uptake and remote sensing estimates of photosynthetic activity.

The northern chronologies show patterns of variation which have climatic implications. Their coefficient of variation reveals periods of agreement/disagreement among the sites which in turn indicate varying periods of spatial coherence in atmospheric circulation patterns. Included among the years of highest variation is 1816, one year following the

Tambora eruption. The tree growth anomalies support the hypothesis of a shift in the atmospheric long wave pattern with enhanced meridional Arctic airflow at this time.

Internal variations of the climate system include the global-scale interactions associated with the El Nino-Southern Oscillation and variations in the monsoon cycle. A Java teak tree-ring series shows a response to ENSO and monsoon precipitation.

?s object? ?

ds

| Set | Items  | Description           |
|-----|--------|-----------------------|
| S1  | 72925  | ENCOD?                |
| S2  | 64601  | DECOD?                |
| S3  | 162547 | REMOTE                |
| S4  | 1311   | PROXY                 |
| S5  | 12056  | S1 AND S2             |
| S6  | 505    | S3 AND S5             |
| S7  | 0      | S4 AND S5             |
| S8  | 17     | S3 AND S4             |
| S9  | 16     | RD S8 (unique items)  |
| S10 | 242619 | OBJECT? ?             |
| S11 | 30     | S6 AND S10            |
| S12 | 30     | S11 NOT S9            |
| S13 | 30     | RD S12 (unique items) |
| S14 | 27     | S13 NOT PY=1992:1993  |

?t 14/7/1-27

14/7/1 (Item 1 from file: 350)  
002352226 WPI Acc No: 80-F8676C/27

Moving object remote radio control system - has control data buffer store with inputs connected to check date receivers, control and command data distributor, and output to computer

Patent Assignee: (LVPO=) LVOV POLY

Author (Inventor): KIRIANAKI N V; BENATOV E G

Number of Patents: 001

Patent Family:

| CC Number | Kind | Date   | Week |         |
|-----------|------|--------|------|---------|
| SU 696414 | A    | 791108 | 8027 | (Basic) |

Priority Data (CC No Date): SU 2529394 (770921)

Abstract (Basic): System is designed for use in programmed measurement, transmission and processing of data about moving objects during tests. Prototype consists of N transceiver sets located in the moving objects and containing measuring transducers 1, analog-to-digital converter 2, antinoise encoder 3, check data transmitter 4, control and synchronising unit 5, command decoder 6 and command receiver 8, and of a control set with check data receivers 9, check data buffer store 10, computer 12, recorder and display unit 13, distributor 14, translator 15, encoding modulators 17, antinoise mixing encoder 17 and transmitter 18.

The addition of command identifying units 7 which extract the command relating to the specific set from the combined command signal transmitted to all the objects, and of control data buffer store 11 reduces the time required for testing several moving objects by allowing simultaneous testing of groups of N objects and provides for automatic test control by computer without the need for operators to be present in the moving objects during tests.

Derwent Class: T06; R26; R31;

Int Pat Class: G05B-019/32; G08C-019/28

14/7/2 (Item 2 from file: 350)

002117489 WPI Acc No: 79-D7412B/17

Two-position object remote controller and monitor - has transistor amplifier base-collector circuit connected across relay contact to allow monitoring of several parameters

Patent Assignee: (MINI-) MINING-ORE RES INST

Author (Inventor): BINUS M S; KHODOS V V

Number of Patents: 001

Patent Family:

| CC Number | Kind | Date   | Week |         |
|-----------|------|--------|------|---------|
| SU 522509 | A    | 780911 | 7917 | (Basic) |

Priority Data (CC No Date): SU 2073804 (741104)

Abstract (Basic): Controller-monitor is suitable for remote control systems using amplitude and polarity differentiation of signals. It has an advantage that several parameters can be monitored. This is achieved by the use of transistor amplifier whose transistor base-emitter is connected across relay normally open (n.o.) contact. The relay connects the object to be monitored.

Controller contains encoder (1), decoder (2), two wire communication lines (3), relays (4, 5) for connection and disconnection of an object, diodes (6, 7), transistor (8), contacts (9), ammeter (10), alarm relays (11, 12), "ON" push button (13), "OFF" push-button (14), diodes (15).

The function of the signal level discriminator is performed by relays (4, 5; 11, 12). Disconnection of an object is done using relay (5), which operates when push-button (14) is pressed.

Derwent Class: T06; W05; R26; R31;

Int Pat Class: G05B-021/02; G08C-019/02

14/7/3 (Item 3 from file: 350)

002117471 WPI Acc No: 79-D7394B/17

Railway points actuator group remote controller - has route change signal shaper input connected to control panel and output to command encoder, to change set route

Patent Assignee: (AUTQ) AUTOMATION INST

Author (Inventor): KOMPANETS L M; FEDOROVSKI V V; BESHENKOV B A

Number of Patents: 001

Patent Family:

| CC Number | Kind | Date   | Week |         |
|-----------|------|--------|------|---------|
| SU 521171 | A    | 760920 | 7917 | (Basic) |

Priority Data (CC No Date): SU 2022709 (740513)

Abstract (Basic): Controller is suitable for wireless control of railway points from moving objects. It has an advantage that remove alteration of previously set route can be obtained. This is achieved by the use of transmitter and receiver with command encoder. Each transmitting set has a change-of-route signal shaper and each receiver has a decoder for data mark and priority signals.

Derwent Class: W05; Q21; R31;

Int Pat Class: B61L-011/08; G08C-019/28

14/7/4 (Item 4 from file: 350)

001883341 WPI Acc No: 78-B2574A/06

Remote control and alarm transmitter - has encoder, command transmitter, relay unit, indicator, priority selection unit, address extractor

Patent Assignee: (PERE/) PEREVALOV V P

Author (Inventor): PEREVALOV V P; ZAGVAZDIN V K; ZORIN M V

Number of Patents: 001

Patent Family:

| CC Number | Kind | Date   | Week |         |
|-----------|------|--------|------|---------|
| SU 555421 | A    | 770601 | 7806 | (Basic) |

Priority Data (CC No Date): SU 2319363 (760130)

Abstract (Basic): Transmitter is suitable for a concentrated group of controlled objects, e.g. automated radio-transmitters of stationary radio-centres. It has an advantage of high efficiency which is achieved by the addition of the priority selection unit and address extractor.

Circuit now comprises remote control units (1) with command forming unit (2) indicator (3), relay unit (4), priority selection unit (5) "address transmission permitted" unit (6), control signal former (7), comparator (8), switch (9), encoder (10), remote control command transmitter (11), receive (12), decoder (13), address extractor (14).

Derwent Class: W05; R31;

Int Pat Class: G08C-019/28

14/7/5 (Item 5 from file: 350)

001883192 WPI Acc No: 78-B2425A/06

Dispersed objects remote controller - has address selector, number forming unit, encoder, decoder and successive command signal former

Patent Assignee: (PETR=) PETRO GAS IND AUTOM

Author (Inventor): ABDULLAEV A A; MUSTAFAEV M M; DZHAVADOV A A

Number of Patents: 001

Patent Family:

| CC Number | Kind | Date   | Week |         |
|-----------|------|--------|------|---------|
| SU 553647 | A    | 770420 | 7806 | (Basic) |

Priority Data (CC No Date): SU 2109774 (750303)

Abstract (Basic): Controller suitable for automation of distributed or dispersed points in the petroleum oil industry, and having advantage of high effectiveness, contains address selector (1), number with integral parameter former (2) command sign former (3), object exclusion unit (4), measurement and control command former (5), control and monitoring command former (6), command output priority assessor (7), manual controller (8), encoder (9) direction commutation linear unit (10), data authenticity monitor (11), decoder (12), remote measurement memory unit (13), remote control memory unit (14), number of monitored object data presence detector (15), frequency-to-code converter (16), measurement programme unit (17), indicator (18) signal processor (computer) (19).

Derwent Class: W05; R31;

Int Pat Class: G08C-019/28

14/7/6 (Item 6 from file: 350)

001730084 WPI Acc No: 77-G6578Y/32

Digital remote control system - has pulse generator, ANDgate OR gate, and encoder at control panel, for controlling closely spaced hardware

Patent Assignee: (SKMI) SKOCHINSKII MINING INST

Number of Patents: 001

Patent Family:

| CC Number | Kind | Date   | Week |         |
|-----------|------|--------|------|---------|
| SU 532878 | A    | 770114 | 7732 | (Basic) |

Priority Data (CC No Date): SU 2144028 (750614)

Abstract (Basic): System suitable for control and monitoring of mining machinery or other machinery concentrated at one location, and having advantage of simplicity and reliability, contains remote control panel and locat control unit, connected by a 3-core cable. The control panel unit forms a cyclic 2-bitsequence of coded pulses which forms the address of the controlled object. As the address code is sent, the appropriate controlled object is selected and locked on to the control wires.

Receiver comprises address wires (21), cycle wire (22) intended for passing the switching signlas for counters at the controlled

objects, address unit (23) of the controlled object, AND-gates (241)-(242) inverter (25), pulse counter (26), decoder (27), OR-gates (281)-(282), duration discriminator (29), memory units (301)-(3016), actuators (311)-(3116) controlled object transmitters (321)-(3216).

Derwent Class: W05; R31;  
Int Pat Class: G08C-019/28

14/7/7 (Item 7 from file: 350)

001698634 WPI Acc No: 77-D5115Y/17

Digital code remote lock - has encoder, decoder, disturbance detector, commutator and voltage analyser

Patent Assignee: (FIRE=) FIREFIGHTING RES IN

Number of Patents: 001

Patent Family:

| CC Number | Kind | Date   | Week |         |
|-----------|------|--------|------|---------|
| SU 511614 | A    | 760813 | 7717 | (Basic) |

Priority Data (CC No Date): SU 2074070 (741111)

Abstract (Basic): Lock, suitable for security systems where remote disconnection of blocked-off objects is required, and having advantage of reduction of the number of conductors contains voltage analyser (1), decoder (2), commutation unit (3), encoder (not shown), disturbance detector (5), code push-buttons (6-15), changeover switches (not shown here), triggers (19,20), transistor switches (21-24), power supply source (25), capacitor (26), relay with contacts (27, 28), lamp (29), plates (30, 31) and resistor (32).

Derwent Class: W05; R31;  
Int Pat Class: G08B-021/01

14/7/8 (Item 8 from file: 350)

001512588 WPI Acc No: 76-H5518X/34

Time division multiplexing remote signalling system - has peripheral devices, synchronisers, encoders, decoders and logic unit

Patent Assignee: (BELO/) BELONOSOV A I

Number of Patents: 001

Patent Family:

| CC Number | Kind | Date   | Week |         |
|-----------|------|--------|------|---------|
| SU 484546 | A    | 751222 | 7634 | (Basic) |

Priority Data (CC No Date): SU 2004468 (740313)

Abstract (Basic): System, suitable for remote transmission of monitored objects data to a central data collection unit, and having advantage of high speed of action, contains peripheral equipment (1), receiver (2), communication line (3), clock pulse generator (4), synchronising pulse shaper (5), in-phase pulse shaper (6), distributor (7), compositor (8), digital converter (9), registers (10, 11), decoder (12), comparator (13), reverse digital converter (14), control unit (15), final converter (16), amplitude discriminator (17), logic data processor (18), memory (19), controlled rectifiers (22-30), unit signal source (21).

Derwent Class: W05; R31;  
Int Pat Class: G08C-019/28

14/7/9 (Item 9 from file: 350)

001497259 WPI Acc No: 76-G0179X/27

Optically based digital encoded object recognition system - using a reflective encoded surface and a light beam (NL220676)

Patent Assignee: (CSFC) THOMSON-CSF

Number of Patents: 012

Patent Family:

| CC Number  | Kind | Date   | Week |         |
|------------|------|--------|------|---------|
| DE 2557535 | A    | 760624 | 7627 | (Basic) |

|            |   |        |      |
|------------|---|--------|------|
| NL 7514767 | A | 760622 | 7628 |
| SE 7514482 | A | 760719 | 7632 |
| DK 7505819 | A | 760913 | 7641 |
| FR 2295495 | A | 760820 | 7644 |
| US 4070584 | A | 780124 | 7806 |
| GB 1514179 | A | 780614 | 7824 |
| CH 607149  | A | 781130 | 7901 |
| AT 7509698 | A | 790115 | 7904 |
| CA 1058728 | A | 790717 | 7932 |
| DE 2557535 | B | 790823 | 7935 |
| IT 1052880 | B | 810720 | 8145 |

Priority Data (CC No Date): FR 7442371 (741220)

Abstract (Basic): The digitally encoded method is for recognizing relatively remote encoded objects such as vehicles passing a particular point on a road. Each object has an encoded reflective plate consisting of a number of vertical strips, some reflective and some not. This is mounted so that a light beam is directed on to it and a detector interprets the reflected beam and the vehicle passes, and decodes the information corresponding to the reflective plate code. The light source (9) may be a laser or iodine quartz lamp. The beam is directed through an aperture in an obliquely mounted mirror (12), which interrupts the reflected beam and directs it through a filter (13) on to a photocell array consisting of one photodiode for each binary digit on the object mounted reflective plate. An electronic clocking and switching network scans the photocell outputs using switching transistors and stores the decoded information in an output store.

Derwent Class: T04; T07; W06; R19; R31; P43; Q21; R28

Int Pat Class: B07C-005/36; B61L-025/04; G01S-009/62; G06K-007/14;

G06K-009/18; G08G-001/04; G06K-000/00

14/7/10 (Item 10 from file: 350)

001448845 WPI Acc No: 76-B1734X/06

Remote controlled missile systems - use fibre optic transmission lines of low loss to transmit control signals to missile

Patent Assignee: (DELU-) DEUT FORSCH LUFT

Number of Patents: 001

Patent Family:

| CC Number  | Kind | Date   | Week         |
|------------|------|--------|--------------|
| DE 2433760 | A    | 760129 | 7606 (Basic) |

Priority Data (CC No Date): DE 2433760 (740713)

Abstract (Basic): Remote control of short range missiles or floating objects is effected by broad bend optical signals transmitted through a fibre optic bundle. A television camera (4) is located in the nose of a missile (2) in either a fixed or movable position. Signals from the camera are transmitted to an encoder (6) operating a modulating laser (8) to provide conversion to optical signals. The optical signals are fed into the fibre optic bundle (12) which is stored in a coil (14) so that it can pay out as the missile leaves the launching pad. An optical coupler and photo diode converts the optical signals to electrical ones that are decoded for display on a C.R.T.

Derwent Class: T06; T07; Q79; R26;

Int Pat Class: F42B-015/04; G05D-001/00

14/7/11 (Item 1 from file: 351)

009187418 WPI Acc No: 92-314857/38

XRPX Acc No: N92-240887

Objects remote control circuit - has clock pulse generator with outputs connected to pseudo random pulse series generator and to start signal shaper first inputs

Patent Assignee: (FARE=) FAR E TECHN INST

Author (Inventor): KONDRAHENKO M I

Number of Patents: 001

Number of Countries: 001

Patent Family:

| CC Number  | Kind | Date   | Week |         |
|------------|------|--------|------|---------|
| SU 1697095 | A1   | 911207 | 9238 | (Basic) |

Priority Data (CC No Date): SU 4398503 (880226)

Abstract (Basic): SU 1697095 A

The circuit comprises - on transmission side: encoder (1), switch (2), frequency modulator (5), pseudo-random pulse series generator (6), wideband filter (7), amplifier (8), aerial (9), clock pulse generator (10) and starting signals shaper (11); on the receiving side aerial (12), amplifier (13), phase modulator (14), pseudo-random pulse series generator (15), narrowband filter (16), phase locked loop (PLL) (17), amplifier (18), frequency detector (19), switch (20), starting signals receiver unit (21), clock pulse generator (22) and decoder (23).

USE - Radio engineering and objects remote control. Bul.

45/7.12.91

Dwg.1/1

Derwent Class: W05;

Int Pat Class: G08C-017/00

14/7/12 (Item 2 from file: 351)

008976787 WPI Acc No: 92-104056/13

XRPX Acc No: N92-077774

Signals transceiver and object position monitor - has logic changeover switch, divider and two-level comparator

Patent Assignee: (COAM) COAL RES DES INST

Author (Inventor): FEDORASHKO I N

Number of Patents: 001

Patent Family:

| CC Number  | Kind | Date   | Week |         |
|------------|------|--------|------|---------|
| SU 1647619 | A    | 910507 | 9213 | (Basic) |

Priority Data (CC No Date): SU 4425660 (880513)

Abstract (Basic): SU 1647619

Transmitter contains signal source (1), encoder (2), transmitter proper (3) with magnetic antenna (4). Receiver contains electric antenna (5), magnetic antenna (6) connected to receivers (7,8), alarm unit (15), time delay relay (16) and AND-gate (10). The input of actuator unit is connected to decoder (11) and time delay relay (16). The antennas (5,6) of the receiving side are located in the nearer zone of antennae (4).

USE/ADVANTAGE - Expt. suitable for remote control has advantage of operational safety achieved by the use of logical changeover switch, divider and twin level comparator on the receiving side. Bul. 17/7.5.91 @ (3pp Dwg. No. 1/1) @

Derwent Class: W05; R31;

Int Pat Class: G08L-019/16

14/7/13 (Item 3 from file: 351)

008878684 WPI Acc No: 92-005955/01

XRPX Acc No: N92-004504

Remote object angular displacement measuring - by encoding reflected light using mirror with dark and coding marks and intensity of light is recorded and decoded

Patent Assignee: (GLEB/) GLEBOVICH L A

Author (Inventor): GLEBOVICH L A; SINYAKOV A A; STRIZHOVA N M

Number of Patents: 001

Patent Family:

CC Number      Kind      Date      Week  
SU 1626087      A      910207      9201      (Basic)

Priority Data (CC No Date): SU 4642057 (890126)

Abstract (Basic): SU 1626087

The device consists of a light source, optical-guide, lens mirror (6), coordinate-sensitive photo-receiver (7), beam coordinate determination unit and unit (11) to decode the number and coordinates of a mark.

Mirror (6) is made with a mirror surface with dark marks and coded marks. During reflection from mirror (6), the light is encoded according to the angular position of the object. The intensity of the light is registered and decoded.

USE - Remote measurement of angular movements of objects. Bul.

5/7.2.91 @ (12pp Dwg. No. 1/9) @

Derwent Class: S02; R11;

Int Pat Class: G01B-021/22

14/7/14      (Item 4 from file: 351)

008856596      WPI Acc No: 91-360617/49

XRPX Acc No: N91-276213

Receiver for remote-control commands - has output of parallel-to series code converter at data input of encoder decoder

Patent Assignee: (UKRE=) UKRENERGOMEKHANIZAT

Author (Inventor): DOMNICH M V; LIZHAKINA T A

Number of Patents: 001

Patent Family:

CC Number      Kind      Date      Week  
SU 1640730      A      910407      9149      (Basic)

Priority Data (CC No Date): SU 4653151 (890220)

Abstract (Basic): SU 1640730

The receiver consists of clock-pulse generator (1), encoder-decoder (2), line coupler (3), memory (4), address decoder (5), decoder (6) for serial number of controlled object, serial-to-parallel code converter (7), parallel-to-serial code converter (8), AND-gate (9), AND-gate unit (10), actuator (11) and OR-gates (12-14).

USE/ADVANTAGE - In remote-indication and remote-control systems operating in the asynchronous mode, ensuring reception of commands for controlling two-position mechanisms. Speed of response is increased and the receiver simplified. Bul. 13/7.4.91. @ (3pp Dwg. No. 1/2) @

Derwent Class: W05; R31;

Int Pat Class: G08C-019/28

14/7/15      (Item 5 from file: 351)

007238159      WPI Acc No: 87-235167/33

XRPX Acc No: N87-175929

Remote control system for rotary device e.g. unbalance compensator - transmits waveform pattern for control function to rotating object via centre contact assemblies

Patent Assignee: (BALA-) BALANCE DYNAMICS CO

Author (Inventor): KERLIN J H

Number of Patents: 001

Patent Family:

CC Number      Kind      Date      Week  
US 4684944      A      870804      8733      (Basic)

Priority Data (CC No Date): US 592147 (840322)

Abstract (Basic): US 4684944

The control system constitutes a single channel, four function-select, power transmission system with an encoder at the stationary location and a decoder on the rotating object. The encoder is used to develop selected electrical waveform patterns each of which

is uniquely correlated with a particular control function to be performed on the rotating object. Each waveform pattern consists of a unique pattern of electrical waveform half cycles.

The particular electrical waveform pattern for the particular control function to be performed is transmitted to the rotating object via centre contact assemblies which engage opposite ends of a spindle on which the rotating object is supported for rotation. The decoder circuit detects the particular electrical waveform pattern which is received on the rotating object and causes the electrical power of that waveform pattern to be used to perform the particular control function.

@(10pp Dwg.No.3/5)@

Derwent Class: S02; W05; R58;

Int Pat Class: H04Q-001/00

14/7/16 (Item 6 from file: 351)

007196600 WPI Acc No: 87-193609/28

Related WPI Accession(s): 89-159843

XRPX Acc No: N87-145054

Optical displacement sensor using fibre optic cables has coded track illuminated by fibre and image reflected onto receiving fibre by mirror adjusted using photo-cell output

Patent Assignee: (ROEC) ROSEMOUNT LTD

Author (Inventor): JOHNSTON J S

Number of Patents: 004

Patent Family:

| CC Number  | Kind | Date   | Week |         |
|------------|------|--------|------|---------|
| GB 2185359 | A    | 870715 | 8728 | (Basic) |
| US 4780600 | A    | 881025 | 8845 |         |
| GB 2210222 | A    | 890601 | 8922 |         |
| GB 2185359 | B    | 900117 | 9003 |         |

Priority Data (CC No Date): GB 8614074 (860610); GB 86591 (860110); GB 8768 (870105); GB 89468 (890110)

Applications (CC, No, Date): US 1782 (870109)

Abstract (Basic): GB 2185359

An optical displacement sensor has an optically detectable PRBS coded track (2) movable relative to a mask (5). The track is illuminated by light conducted by an optical fibre (1) from a remote light source (14) and the image of the track is focused by a mirror (4) on to the aperture of a second fibre (6). The mirror is mechanically movable to scan the image of the code over the fibre end to produce light pulses in the fibre which can be decoded at a remote receiver (15).

The mirror is actuated electrically by a photo-voltaic cell (8) illuminated by light from a third fibre (7). Bits in the coded track are only partially opaque so the edges of the mask can be recognised by the receiver as the mirror is scanned. The photo-voltaic cell may alternatively be illuminated by light which has passed through the track, the mirror being partially reflecting.

ADVANTAGE - Unique position on track can be determined. Power to remote object is transmitted optically. @ (8pp Dwg.No 1/6)@

Abstract (US): 8845 US 4780600

The optical displacement sensor has an optically detectable coded track movable relative to a mask. The track is illuminated by light conducted by an optical fibre from a remote light source and the image of the track is focussed by a mirror on to the aperture of a second fibre. The mirror is mechanically movable to scan the image of the code over the fibre end to produce light pulses in the fibre which can be decoded at a remote receiver.

The mirror is actuated electrically by energy from a photo-voltaic cell illuminated by light from a third fibre. Bits in the coded track

are only partially opaque but the mask is fully opaque so the edges of the mask can be recognised by the receiver as the mirror is scanned.

@(7pp)@

Abstract (GB): 9003 GB 2185359

An optical displacement transducer comprising an optically detectable coded track and means to read from the track a binary word uniquely defining the position along the track, wherein said means to read comprises a light source, optical scanning means which is mechanically movable to scan the binary word on the track to generate from said light source a light signal serially encoded with said binary word, optical fibre means for conducting said light signal from the scanning means to a remote location, electric actuating means to effect the scanning movement of the optical scanning means, and a photo electric conversion device connected to provide electric motive power to the actuating means from light incident on the conversion device.

Derwent Class: U21; V07; W05; R55;

Int Pat Class: H03M-001/22; G06F-015/20

14/7/17 (Item 7 from file: 351)

007166388 WPI Acc No: 87-163397/23

XRPX Acc No: N87-122672

Remote surveillance device for living creature movement has coded radio transmitter whose signals are detected and interpreted in terms of range and bearing

Patent Assignee: (ROYO/) ROYOUX G; (LIMO/) LIMOUZIN D

Author (Inventor): ROYOUX G

Number of Patents: 010

Patent Family:

| CC Number   | Kind | Date   | Week |         |
|-------------|------|--------|------|---------|
| WO 8703404  | A    | 870604 | 8723 | (Basic) |
| FR 2590680  | A    | 870529 | 8728 |         |
| EP 230173   | A    | 870729 | 8730 |         |
| AU 8767228  | A    | 870701 | 8737 |         |
| NO 8702958  | A    | 870914 | 8741 |         |
| DK 8703746  | A    | 870717 | 8809 |         |
| FI 8703219  | A    | 870722 | 8818 |         |
| JP 63501747 | W    | 880714 | 8834 |         |
| EP 230173   | B    | 910227 | 9109 |         |
| DE 3677746  | G    | 910404 | 9115 |         |

Priority Data (CC No Date): FR 8517591 (851128)

Applications (CC, No, Date): WO 86FR407 (861128); EP 86402650 (861128); JP 86506384 (861128)

Language: French

EP and/or WO Cited Patents: US 4528566; US 3366958; GB 1486159; FR 2541021; GB 2071956; US 3336530; GB 1586159

Designated States

(National): AU; JP; KR; NO; US  
(Regional): CF; CG; CM; GA; ML; MR; SN; TD; TG; AT; BE; CH; DE; ES; FR; GB  
; GR; IT; LI; LU; NL; SE

Filing Details: EP0230173 Based on WO8703404 (1455ND); JP63501747 Based on WO8703404 (5pp)

Abstract (Basic): WO 8703404

The transmitter (1) carried by an animal or child liable to stray incorporates a VHF oscillator (6) generating signals at e.g. 72 MHz which are modulated by a sequencer (8) and encoder (9). The code word of e.g. 9 bits identifying the carrier is detected in a superheterodyne receiver utilising a whip antenna (5), and decoded (28) for display by an array of seven LEDs while an audible alarm (30) is sounded.

The array comprises three green LEDs (41-43), two amber ones (39,40) and two red ones (37,38) energised selectively as a function of

the received signal strength and the pointing of the antenna (5). A more precise and economical display may be constructed from liq. crystals.

ADVANTAGE - The animal or child can be distinguished among a number of others and located precisely in direction and distance.

@(14pp Dwg.No.2/4)@

Abstract (EP): 9109 EP 230173

Device for the remote surveyance of a moving object, an animal or a human being, comprising on an object, the animal or the human being monitored, a portable transmitter (1) comprising an RF oscillator (6), means (8,9) for chopping the output RF carrier from the oscillator (6) into a train of amplitude modulated signals forming a coded signal of identification of the holder of the transmitter, and an antenna (4) transmitting the coded signal, and a remote receiver housed in a portable casing (2) and comprising a receiver antenna (5) for picking up the coded signal received coming from the transmitter (1) and means for producing a signal for locating the direction in which the holder of the transmitter (1) is located, characterised in that the receiver comprises only one whip antenna (5) manually orientable in all directions and the receiver circuit comprises a decoder (28) at the input of which is applied the coded signal received, means (30,31,33) producing a sound signal connected at the output of the decoder (28) so as to be put into operation only when the coded signal received is recognised as being valid by the decoder (28) and means (32,39-43) producing a variable light signal connected to the output of the decoder (28) to give a visual indication varying as a function of the direction and the distance of the transmitter (1). @(9pp)@

Derwent Class: W02; W05; R31; R19

Int Pat Class: G08B-021/00; G01S-013/06; G08B-005/00; G08B-000/00;

G01S-005/02

14/7/18 (Item 8 from file: 351)

007121520 WPI Acc No: 87-121517/17

XRPX Acc No: N87-090877

Group object remote control system has address selection unit, coder, information board, shaper and N decoders with outputs to corresp. actuators

Patent Assignee: (KUZN/) KUZNETSOV N N

Author (Inventor): KUZNETSOV N N; RUMYANTSEV V V; NESTERENKO V F

Number of Patents: 001

Patent Family:

| CC Number  | Kind | Date   | Week         |
|------------|------|--------|--------------|
| SU 1255998 | A    | 860907 | 8717 (Basic) |

Priority Data (CC No Date): SU 3802619 (841012)

Abstract (Basic): SU 1255998

Remote control system comprises the receiver selection unit coder (2), control indicator (3), starting unit (4), stopping unit (5), decoders (6,1-6,n), actuators (7,1-7,n), information board control unit (8), shaper (9), information board (10) and controlled objects. The starting unit (4) includes the start button and stop button. The decoder (6) of each of the controlling channels comprises the stopping unit (5) commutation unit actuators the encoder (2) commutation unit actuators and actuator. The shaper (9) consists of an actuator and one-way conducting element. The actuator (7) is represented by a magnetic starter with contacts. The encoder (2) has commutating elements and one-way conducting elements e.g. diodes.

In order to start the controlled object, the address code is set up in the unit (1). The encoder (2) prepares the intermediate elements of the corresp. control channel. A command for starting the encoder (2) start elements is given. The control signal from the coder (2) enters

the decoder (6) of the corresp. control channel. The decoder (6) switches on the actuator (7) which commutes the control object (11) power line.

USE/ADVANTAGE - System can be used for automatic control of technological processes with a large number of actuators. It is simplified and power losses are reduced. Bul. 33/7.9.86 @ (6pp Dwg. No. 1/2) @

Derwent Class: T06; R26;  
Int Pat Class: G05B-024/02

14/7/19 (Item 9 from file: 351)

007013796 WPI Acc No: 87-013793/02

XRPX Acc No: N87-010108

Auto-operator grab programmed controller has AND-gates, OR-gates and flip-flops with pulse shapers arranged for coordinate positioning

Patent Assignee: (KOSH/) KOSHKIN V L

Author (Inventor): KOSHKIN V L; SIMETSKII Y U A

Number of Patents: 001

Patent Family:

| CC Number  | Kind | Date   | Week         |
|------------|------|--------|--------------|
| SU 1233103 | A    | 860523 | 8702 (Basic) |

Priority Data (CC No Date): SU 3530604 (830106)

Applications (CC, No, Date): SU 3530604 (820106)

Abstract (Basic): SU 1233103

Controller contains control desk (1), encoder (2), up-down counter (3), counters-dividers (4,5), buffer registers (6,7), comparators (8,9), counters (10,11), AND-gates (12-18), transmitter (19) for displacement of the grip along coordinate X and similar transmitters for positioning the grip along the Y and Z coordinates.

The operation of the unit can produce three main operating cycles set by the operator. The first cycle consists of placement from zero into the address and the grip goes along the address, the grip grabs the object, moves along the given address, lays down the object and remains along the address. The second cycle consists of movement from zero into the address, the grip enters 'zero' mode, the grip grabs the object, then moves to the address, then lays down the object and remains at that address. The third cycle comprises taking out of the address, applying the grip along the address and the grip entering the zero mode and remaining at zero.

USE/ADVANTAGE - Suitable for automation and computers, and for control of various remote control devices, and can be used e.g. in galvanic lines, automated warehouses and industrial processes. It has advantage of simplicity and wide application, due to possibility of control of a grip by auto operator along three coordinates, by the use of eight AND-gates, eleven OR-gates, three NOT-gates, IK-trigger, two RS-triggers, zero decoder and pulse former. Bul. 19/23.5.86 @ (16pp Dwg. No. 1/11) @

Derwent Class: T06; R26;  
Int Pat Class: G05B-019/18

14/7/20 (Item 10 from file: 351)

004523781 WPI Acc No: 86-027125/04

XRPX Acc No: N86-019724

Remote control system control point has counter, forming unit, commutator, and register outputs coupled to encoder and decoder

Patent Assignee: (PROM=) PROMAVTOMATIKA DES

Author (Inventor): PORTINOV M L

Number of Patents: 001

Patent Family:

| CC Number | Kind | Date | Week |
|-----------|------|------|------|
|-----------|------|------|------|

SU 1166161 A 850707 8604 (Basic)  
Priority Data (CC No Date): SU 3695990 (840126)  
Abstract (Basic): SU 1166161

Remote control point suitable for remote control with time division of signals has advantage of high throughput capacity achieved by the use of counter, forming unit, commutator, encoder, decoder and register whose first two outputs are connected to the corresponding encoder and decoder circuits.

In order to transmit and receive data from monitored points into the control unit linear units (3,4) are connected. The communication with the monitored points is done by radial or transit line communication lines. Each position of counter (10) is converted by forming unit (11) into position code which via commutator (12) is applied to the address rails of all units. Simultaneously to the second input of line units, data is applied using unity signal from first output of distributor (2) which is interpreted as the ready signal. The type of encoder is determined by the used protection method of data. For example, with the use of cyclic code of protection the encoder is formed by a shift register with feedback elements.

ADVANTAGE - The unit gives a possibility of directing the data from monitored object connected to radial or transit communication lines, and increased let-through capacity. Bul.25/7.7.85. @(6pp

Dwg.No.1/2)@

Derwent Class: W05; R31;  
Int Pat Class: G08C-015/06; G08C-019/28

14/7/21 (Item 11 from file: 351)  
003999649 WPI Acc No: 84-145191/23

XRPX Acc No: N84-107804

Distributed objects remote-control system uses pulse distributors encoding check-point switching operations, with further distributor, detector, selector and measurement element

Patent Assignee: (AVTO=) AVTOMATGORMASH MACH.

Author (Inventor): LAGUNOVICH E F; SIDYAK V A; VERKHOVSKI Y A M

Number of Patents: 001

Patent Family:

| CC Number  | Kind | Date   | Week         |
|------------|------|--------|--------------|
| SU 1042061 | A    | 830915 | 8423 (Basic) |

Priority Data (CC No Date): SU 3327615 (810807)

Abstract (Basic): SU 1042061

The telemechanics system is designed for physically widespread objects having network structures and reliability of data transmission is improved, the system simplified and its resistance to interference increased by introducing a second pulse distributor, detector, selector and measurement element.

The output of pulse generator (1) is applied to clock bus (23) and distributor (2), whose first position is connected to distributors (3,4), to create two pulse trains going via clock buses (20,21) to switching distributors at the check point. When one of the auxiliary switches on the apparatus of the check point closes, its signal is passed via a pulse distributor controlled by clock bus (23) to a comparator and load, to the switching distributor and back to the control board via bus (22). The signals from distributors (2,3) meet in decoder (6), which decodes the check-point switching for display (7), which indicates the state of the sections being controlled.

Bul.34/15.9.83. @(6pp Dwg.No.1/2)@

Derwent Class: W05; R31;  
Int Pat Class: G08C-019/28

14/7/22 (Item 12 from file: 351)

Passive electronic identification system for control of stock has feed dispenser operated using tag around animal's neck to supply binary-coded number in response to electromagnetic field

Patent Assignee: (BIIN-) BI INC; (BIBI-) BI INC

Author (Inventor): CARROLL G T

Number of Patents: 007

Patent Family:

| CC Number  | Kind | Date   | Week |         |
|------------|------|--------|------|---------|
| WO 8401688 | A    | 840510 | 8420 | (Basic) |
| AU 8322643 | A    | 840522 | 8433 |         |
| US 4475481 | A    | 841009 | 8443 |         |
| EP 125287  | A    | 841121 | 8447 |         |
| CA 1206532 | A    | 860624 | 8630 |         |
| EP 125287  | B    | 900328 | 9013 |         |
| DE 3381387 | G    | 900503 | 9019 |         |

Priority Data (CC No Date): US 437841 (821029); US 280341 (810706); EP 83903741 (831026); WO 83US1690 (831026)

Language: English

EP and/or WO Cited Patents: US 4129855; US 3465724; US 3516575; US 3541995; US 3557758; US 4272083; US 4262632; US 3859624; US 4196418; US 4247758

Designated States

(National): AU; BR; JP

(Regional): AT; BE; CH; DE; FR; GB; LU; NL; SE; LI

Filing Details: EP0125287 Based on WO8401688 (1199KJ); EP0125287 Based on WO8401688 (+26.10.83-WO-U01690)

Abstract (Basic): WO 8401688

The device is mounted on a feeder into which e.g. a dairy cow places its head to reach food. A tag receives a signal from the primary winding of an air-cored transformer, at a frequency of twenty kilohertz. The signal is rectified in the transponder tag to energise its internal circuitry to emit a burst of digital data from an encoder and RF oscillator running at 3.5 MHz. The receiver in the identifying device sends a serial bit stream to circuits for identifying a valid code number.

A signal is sent to the central computer for a decision to allow feed to be supplied to the cow by driving a motor which runs an auger to dispense the feed. The computer determines the time for which the motor runs and, consequently, the amount of food supplied. @ (44pp

Dwg. No. 4/10) @

Abstract (US): 8443 US 4475481

A self-resonating power supply oscillator is electrically connected to a power supply. A coil is connected to the oscillator so that when the supply activates the oscillator for a first time interval, during which oscillator drives the coil at a first frequency. RF transmitters separate and spaced from an electromagnetic field generator include a second coil for receiving electrical energy from the generator at a position remote from it.

A transmitted encoded signal is received at a remote location. A comparator connected to a decoder compares the received decoded signal with stored data to identify the specific transmitter whose signal has been received.

USE - For dairy industry. @ (16pp) @

Abstract (EP): 9013 EP 125287

An identification system for uniquely identifying a plurality of objects comprising identifier means (2) including driver oscillator means for generating a first signal at a first frequency, computer means for enabling said driver oscillator means, only at desired times and for desired durations, and means for transmitting said enabled

first signal to a portable transponder unit (1); a portable transponder unit (1) comprising antenna circuit means (L1, C7, C2, Q1) for receiving said first signal at said first frequency, start circuit means (CR1, C1, R1, Q2) for generating a start signal in response to reception of said first signal, encoding means (EN-12) for generating a preprogrammed coded signal in response to said start signal, modulation means (Q3) for generating a second signal at a second frequency and for modulating said second signal with said preprogrammed coded signal and for presenting said modulated second signal to said antenna circuit means; and said identifier means (2) further including means for receiving, detecting, and decoding the second signal generated by said portable transponder unit (1), said decoded signal being relatable to said preprogrammed coded signal generated by the encoding means (EN-12) of said portable transponder unit (1); whereby said decoded signal may be used uniquely identify an object to which said portable transponder unit (1) is attached when said transponder unit is preprogrammed with a unique identifying code, wherein the first signals transmitted from the identifier means (2) and the second signals transmitted from the portable transponder unit (1) are transmitted as periodic bursts of electromagnetic energy, the second signal bursts from the portable transponder unit (1) being transmitted during the pauses between the first signal burst transmitted from the identifier means (2); characterised in that the antenna circuit means (L1, C7, Q1, C2) of the portable transponder unit includes a single antenna coil (L1), and

Derwent Class: T06; W06; X25; P14; R56; R29

Int Pat Class: A01K-005/02; H04B-007/00; A01K-011/00; G07C-009/00

14/7/23 (Item 13 from file: 351)

003365462 WPI Acc No: 82-M3488E/38

Two or three dimensional motion control e.g. vehicle or machine using laser transmitter giving positional data of object with computer controlling guidance

Patent Assignee: (MAUG ) MAN MASCH AUGSBURG-NURNB

Author (Inventor): HIRT D

Number of Patents: 002

Patent Family:

| CC Number  | Kind | Date   | Week |         |
|------------|------|--------|------|---------|
| DE 3107674 | A    | 820916 | 8238 | (Basic) |
| DE 3107674 | C    | 900329 | 9013 |         |

Priority Data (CC No Date): DE 3107674 (810228)

Abstract (Basic): The guidance system uses a laser emission system to provide an accurate position location signal. Two laser transmitters are located a fixed distance apart and the intersection point defines the vehicle or machine position.

The transmitter stations have a laser (25), modulator (26) and focussing lens system (27). The instantaneous angle of the emission is determined by an encoder (28), operating into a microcomputer (29). The signals are received (35), processed through a photomultiplier (36) and decoded (37). The required course is determined by a microcomputer (38) that provides comparison with actual position (39). A course control unit is then activated (40). (17pp Dwg.No.2/6)

Abstract (DE): 9013 DE 3107674

The method of controlling the movement of unguided objects requires the use of at least two fixed senders (transmitters) spaced apart from one another. Each radiates a tightly-focussed intensity-modulated laser beam (20, 21). The instantaneous position of the objects (10) long-towinal axis is calculated according to the location and direction relative to the reference axes (17, 18) from data on the radiating angle (alpha, beta) and the angle of incidence of at least one of the received laser beams.

The instantaneous radiating angle (alpha or beta) of the laser beams (20) or (21) is detected by means of an angle decoder (28) and then fed to a microcomputer (29). The microcomputer memory holds preprogrammed values of the required course (K). The laser beam is then modulated in relation to the information received from the microcomputer (29) about the radiation angle and the required course (K) and the radiated via the optical system (27).

USE - Remote guidance control of machine tools, e.g. channel

milling machines, also for direct control of vehicle movement. @ (7pp) @

Derwent Class: T06; T07; R26; R19

Int Pat Class: G05D-001/02; G01S-017/00

14/7/24 (Item 14 from file: 351)

003260174 WPI Acc No: 82-B1896E/05

Power distribution network remote control has switch addresses, command and code address at discrete controlled points

Patent Assignee: (ALEK/) ALEKSEEV YU V

Author (Inventor): ALEKSEEV Y U V; BARABOSHKI R A; BELYGIN V V

Number of Patents: 001

Patent Family:

| CC Number | Kind | Date   | Week         |
|-----------|------|--------|--------------|
| SU 824261 | A    | 810423 | 8205 (Basic) |

Priority Data (CC No Date): SU 2785773 (790628)

Abstract (Basic): Remote controls through the 6 - 35 Kv electrical power networks uses the position and digit switches, address and commands encoders on the despatcher side to simplify the circuitry and increase the number of controlled points.

The controlled points are interrogated either cyclically or sporadically using code channel division. The address part of the coded signal comprises (n-1) digit, with the data encoded in the last digit.

The object condition interrogations are initiated by the starting push button. The starting pulse enables generators (4) and the position switch (2) forming the digits under digit switch (3) controls. The controls (7) and former (1) send the command to the respective control points. The response pulse length depends on the object condition which is decoded by comparison with the standards. In the control mode the address and command codes are decoded sequentially indicating the transmission routine. Bul.15/23.4.81 (5pp Dwg.No.1)

Derwent Class: W05; X12; R31;

Int Pat Class: G08C-019/12

14/7/25 (Item 15 from file: 351)

003076111 WPI Acc No: 81-H6150D/33

Data transmitter for computer has command distributor with mobile monitor feeding signals to stationary point, eliminating operator participation

Patent Assignee: (SIGN=) SIGNALLING COMMUNIC

Author (Inventor): LEBEDEV M M; SKLYANKIN I N; SHTERMAN L M

Number of Patents: 001

Patent Family:

| CC Number | Kind | Date   | Week         |
|-----------|------|--------|--------------|
| SU 773675 | A    | 801026 | 8133 (Basic) |

Priority Data (CC No Date): SU 2728444 (790219)

Abstract (Basic): Transmitter is suitable for automation and remote control and can be used in rail transport for monitoring dislocation of refrigerated cars in the railway network. It can operate automatically for a very remote central point, by use of a command distributor, transmitter controller and logic units.

System contains mobile monitor (1) coupled to stationary monitoring point (2) connected to central computer (3) via

communications channels (5). The data from monitored points passes along telegraph channels (5) to computer (4) of central point (3) where data processing is carried out to alphanumeric printer (6) and video monitor (7).

When the rail cars are in the active zone of the monitor point (2) the power supply of the stationary apparatus is connected in. The receiver of the mobile object receives a pulse series and, after decoding, the setting of the initial state of mobile element memory takes place. The first pulse starts the command distributor activating AND-gates which convert parallel code recorded in the encoder. Frequency divider forms cycle pulses in phase with the data transmissions. Bul. 39/23.10.80. (5pp Dwg.No.1)

Derwent Class: T05; W05; X23; R29; R31;  
Int Pat Class: G07C-005/08; G08C-019/28

14/7/26 (Item 16 from file: 351)

003057594 WPI Acc No: 81-F7630D/25

Centralised fire warning system comprises commutator with concentrator scanner connected to new data memory via amplifier

Patent Assignee: (FIRE=) FIRE PREVENTION RES

Author (Inventor): STRELNIKOV G I; GUDKOV A V; KYCHKIN I N

Number of Patents: 001

Patent Family:

| CC Number | Kind | Date   | Week         |
|-----------|------|--------|--------------|
| SU 760149 | A    | 800830 | 8125 (Basic) |

Priority Data (CC No Date): SU 2620572 (780524)

Abstract (Basic): Improved reliability and wider functional capacity of the centralised monitoring of fire in remote objects as well as enhanced operation of the system are ensured by the commutator. It comprises connecting blocks and scanners of concentrators with repeater amplifiers, while the indicator of new information ensures discrimination of data. The warning signals are fed by detectors (1) on the protected objects with the cyclic interrogation of the data concentrator carried by block (2).

The information is transferred to receiver (3) which ensures the decoding for writing in memory (5). If the information is new then the detector (6) stores the data in buffer memory (7) connected to transmitter (9) via encoder (8). The interrogator (12) of the concentrators and of commutators drives controller (13) of the retransmission amplifier (14) with the output unit (16) feeding receiver (17) of buffer memory (18). The content of the latter is transferred to memory (20) for lamp signalling. Bul.32/30.8.80.

Derwent Class: W05; R31;

Int Pat Class: G08B-025/00

14/7/27 (Item 17 from file: 351)

003033101 WPI Acc No: 81-D3115D/15

Remote controller and signalling unit includes data channels selector connected to address generator and comparator, automating telecontrol process

Patent Assignee: (PERE/) PEREVALOV V P

Author (Inventor): PEREVALOV V P

Number of Patents: 001

Patent Family:

| CC Number | Kind | Date   | Week         |
|-----------|------|--------|--------------|
| SU 748486 | A    | 800715 | 8115 (Basic) |

Priority Data (CC No Date): SU 2608859 (780503)

Abstract (Basic): Wider function of the unit for remote measuring and signalling is ensured by the controller and the commutator of remote control channels. The address of the controlled object is recorded in

each shaper (7) while the sequence of commands is set in the priorities selector (20). The command signal of telecontrol and for starting is generated by shaper (2) and selector (20) transmits the corresponding address from repeater (3). The required commutation sequence of switching units (15/16) is set by controller (21) for activating modulation of receiver (17) and transmitter (14) while the work rate is determined by encoder (13) and decoder (18). The address command from shaper (7) passes control switch (12) to reach encoder (13) and the converted signals are fed to commutator (15) by transmitter (14).

Bul.26/15.7.80.

Derwent Class: W05; R31;  
Int Pat Class: G08C-019/28

?s interprocess?

S15 3627 INTERPROCESS?

?s s15 or inter()process

3627 S15

61007 INTER

1409992 PROCESS

426 INTER (W) PROCESS

S16 4010 S15 OR INTER () PROCESS

?s s1 or translat?

Processing

72925 S1

127299 TRANSLAT?

S17 197835 S1 OR TRANSLAT?

?s s16 and s17

4010 S16

197835 S17

S18 83 S16 AND S17

€ 18/679-5184571 DISTRIBUTED

?s s18 and s19

83 S18

184571 S19

S20 22 S18 AND S19

?rd s20

>>>Duplicate detection is not supported for File 350.

>>>Duplicate detection is not supported for File 351.

>>>Records from unsupported files will be retained in the RD set.

...completed examining records

S21 16 RD S20 (unique items)

?s s21 not (s9 or s14)

16 S21

16 S9

27 S14

S22 16 S21 NOT (S9 OR S14)

?s s22 not py=1992:1993

16 S22

1353493 PY=1992 : PY=1993

S23 11 S22 NOT PY=1992:1993

?t 23/7/1-11

1

23/7/1 (Item 1 from file: 2)

03908335 INSPEC Abstract Number: C91042546

Title: Axon network virtual storage for high performance distributed applications

Author(s): Sterbenz, J.P.G.; Parulkar, G.M.

Author Affiliation: Comput. & Commun. Res. Center, Washington Univ., St. Louis, MO, USA

Conference Title: Proceedings. The 10th International Conference on

Distributed Computing Systems (Cat. No.90CH2878-7) p.484-91  
Publisher: IEEE Comput. Soc. Press, Los Alamitos, CA, USA  
Publication Date: 1990 Country of Publication: USA xxi+600 pp.  
ISBN: 0 8186 2048 X  
U.S. Copyright Clearance Center Code: CH2878-7/90/0000-0484\$01.00  
Conference Sponsor: IEEE; INRIA  
Conference Date: 28 May-1 June 1990 Conference Location: Paris, France  
Language: English Document Type: Conference Paper (PA)  
Treatment: Practical (P)  
Abstract: An introduction to the Axon architecture is presented. Axon is a host communication architecture for the distributed systems which can support interprocess communication with high throughput and low latency across a very high-speed internetwork. Network virtual storage (NVS) in the Axon host communication architecture for distributed applications is described. NVS extends segmented paged virtual storage management and address translation mechanisms to include segments located across an internetwork. This provides the ability to use efficiently the shared-memory paradigm in distributed systems for high-performance applications, such as scientific visualization and imaging. (16 Refs)

23/7/2 (Item 2 from file: 2)  
03617726 INSPEC Abstract Number: B90030974, C90034560  
Title: Preserving and using context information in interprocess communication

Author(s): Peterson, L.L.; Buchholz, N.C.; Schlichting, R.D.  
Author Affiliation: Arizona Univ., Tucson, AZ, USA  
Journal: ACM Transactions on Computer Systems vol.7, no.3 p.217-46  
Publication Date: Aug. 1989 Country of Publication: USA  
CODEN: ACSYEC ISSN: 0734-2071  
U.S. Copyright Clearance Center Code: 0734-2071/89/0800-0217\$01.50  
Language: English Document Type: Journal Paper (JP)  
Treatment: Practical (P)

Abstract: When processes in a network communicate, the messages they exchange define a partial ordering of externally visible events. While the significance of this partial order in distributed computing is well understood, it has not been made an explicit part of the communication substrate upon which distributed programs are implemented. The paper describes a new interprocess communication mechanism, called Psync, that explicitly encodes this partial ordering with each message. The paper shows how Psync can be efficiently implemented on an unreliable communications network, and it demonstrates how conservations serve as an elegant foundation for ordering messages exchanged in a distributed computation and for recovering from processor failures. (29 Refs)

23/7/3 (Item 3 from file: 2)  
02966994 INSPEC Abstract Number: C87053030  
Title: Preserving context information in an IPC abstraction  
Author(s): Peterson, L.L.  
Author Affiliation: Dept. of Comput. Sci., Arizona Univ., Tucson, AZ, USA  
Conference Title: Proceedings of the Sixth Symposium on Reliability in Distributed Software and Database Systems (Cat. No.87CH2411-7) p.22-31  
Publisher: IEEE Comput. Soc. Press, Washington, DC, USA  
Publication Date: 1987 Country of Publication: USA x+213 pp.  
ISBN: 0 8186 0737 8  
U.S. Copyright Clearance Center Code: CH2411-7/87/0000-0022\$01.00  
Conference Sponsor: IEEE; ACM  
Conference Date: 17-19 March 1987 Conference Location: Williamsburg, VA, USA  
Language: English Document Type: Conference Paper (PA)  
Treatment: Practical (P); Theoretical (T)

Abstract: An interprocess communication abstraction called a conversation is described. Although it provides an asynchronous message-passing facility, the conversation abstraction encodes synchronization information drawn from the distributed computation's logical clock with each message. The conversation abstraction can be implemented on an unreliable communications network at little cost, and because processes are free to use the synchronization information as needed, it is general enough to support efficient and elegant implementations of a wide spectrum of communication paradigms. (12 Refs)

23/7/4 (Item 4 from file: 2)

01724188 INSPEC Abstract Number: C81026695

Title: An experimental implementation of CSP

Author(s): Shrira, L.; Francez, N.

Author Affiliation: Computer Sci. Dept., Technion-Israel Inst. of Technol., Haifa, Israel

Conference Title: 2nd International Conference on Distributed Computing Systems p.126-36

Publisher: IEEE, New York, NY, USA

Publication Date: 1981 Country of Publication: USA xi+524 pp.

Conference Sponsor: Inst. Nat. Recherche & Inf. Autom.; Lab. Recherche & Inf.; Paris-Sud Univ., Orsay

Conference Date: 8-10 April 1981 Conference Location: Paris, France

Language: English Document Type: Conference Paper (PA)

Treatment: Applications (A); Theoretical (T)

Abstract: Describes an experimental implementation of CSP-a high level language for distributed programming. The implementation consists of a compiler translating into a specially designed intermediate language, whose execution is done in two levels: local code interpretation for sequencing and local computation and an asymmetric distributed handshaking protocol for handling interprocess communication. The paper stresses the handling of the novel features of CSP, especially the use of communication commands as guards in guarded commands. (13 Refs)

23/7/5 (Item 5 from file: 2)

01603958 INSPEC Abstract Number: B80054703, C80035509

Title: KENSUR: an architecture oriented towards programming languages translation

Author(s): Andre, F.; Banatre, J.P.; Leroy, H.; Paget, G.; Ployette, F.; Routeau, J.P.

Author Affiliation: Lab. d'Informatique, IRISA, Rennes, France

Conference Title: Conference Proceedings of the 7th Annual Symposium on Computer Architecture p.17-22

Publisher: IEEE, New York, NY, USA

Publication Date: 1980 Country of Publication: USA 333 pp.

Conference Sponsor: IEEE; ACM

Conference Date: 6-8 May 1980 Conference Location: La Baule, France

Language: English Document Type: Conference Paper (PA)

Treatment: Applications (A); New Developments (N)

Abstract: Discusses three main aspects of the construction of this network. The various steps involved in the design of such a distributed system are described and the architecture adapted to the logical structure and dynamic characteristics of the application is presented. The architecture of the currently implemented prototype is presented and problems with inter-processor communications and memory sharing are discussed. The kernel system facilities for process management and synchronisation are described. (6 Refs)

23/7/6 (Item 1 from file: 6)

1590079 NTIS Accession Number: TIB/A91-02732/XAB

Spezifikation der Prozesse und Protokolle zur Authentifizierung von Subjekten in einem verteilten Rechnersystem. (Specification of processes and protocols for authentication of subjects in a distributed computer system)

Buchholz, C.

Technische Univ. Berlin (Germany, F.R.). Fachbereich 20 - Informatik.

Corp. Source Codes: 030172017; 9202770

1990 73p

Languages: German

Journal Announcement: GRAI9209

In German. Forschungsberichte des Fachbereichs Informatik, Technische Universitaet Berlin, no. 90/31.

NTIS Prices: PC E09

Country of Publication: Germany, Federal Republic of

Communicating processes cannot be authenticated unless one provides for an exchange of authentic data, i.e. an authentication of the objects of communication. Exchanged data may be authenticated with the help of encoding methods. Different encoding methods are investigated for their transmission-securing properties in interprocess communication. Based on a hybrid symmetrical/asymmetrical encoding approach, protocols for the authentication of communicating subjects by use of distributed codes are examined. The protocol definitions provide the basis for the specification of modules needed to convert the protocols. The modules provide specifications for an authentication server, for functions controlling the authentication protocol sequences on the client application side, and for corresponding functions to be integrated into server applications. The system is able to cope with the problem defined but aspects concerning its implementation remain to be settled. Its public user codes require an assessment of whether and how standardized, globally available information systems, e.g. the X.500 directory service, may be used for code data administration. The rate at which functions are executed decides the acceptance of safety mechanisms. Implementation expenses must be assessed to minimize user processing delays due to authentication. The authentication module may be extended to obtain a communication module for a safe exchange of data with transparent data authentication and encoding functions. (orig.). (Available from TIB Hannover: RN 2856(90/31).) (Copyright (c) 1991 by FIZ. Citation no. 91:002732.)

23/7/7 (Item 2 from file: 6)

1509829 NTIS Accession Number: N91-12216/8/XAB

Compiling Global Name-Space Programs for Distributed Execution  
(Final Report)

Koelbel, C. ; Mehrotra, P.

Institute for Computer Applications in Science and Engineering, Hampton,  
VA.

Corp. Source Codes: 054882000; IJ535353

Sponsor: National Aeronautics and Space Administration, Washington, DC.

Report No.: NAS 1.26:187454; ICASE-90-70; NASA-CR-187454

Oct 90 37p

Languages: English

Journal Announcement: GRAI9107; STAR2903

NTIS Prices: PC A03/MF A01

Country of Publication: United States

Contract No.: NAS1-18605; N00014-88-M-0108

Distributed memory machines do not provide hardware support for a global address space. Thus programmers are forced to partition the data across the memories of the architecture and use explicit message passing to communicate data between processors. The compiler support required to allow programmers to express their algorithms using a global name-space is examined. A general method is presented for analysis of a high level source program and along with its translation to a set of independently executing

translation hardware. The high-level nature of the coprocessor-executed instructions and data caching on each coprocessor chip overcomes the interprocessor communication overhead, making the overall throughput comparable to that of single-chip RISCs. 14 refs.

23/7/10 (Item 2 from file: 8)

02271985 E.I. Monthly No: EIM8709-059659

Title: FAULT MASKING AND SEQUENCE AGREEMENT BY A VOTING PROTOCOL WITH LOW MESSAGE NUMBER.

Author: Echtle, Klaus

Corporate Source: Univ of Karlsruhe, West Ger

Conference Title: Proceedings - Sixth Symposium on Reliability in Distributed Software and Database Systems.

Conference Location: Williamsburg, VA, USA Conference Date: 1987 Mar 17-19

Sponsor: IEEE Computer Soc, Technical Committee on Distributed Processing, Los Alamitos, CA, USA; IEEE Computer Soc, Technical Committee on Fault-Tolerant Computing, Los Alamitos, CA, USA; ACM, New York, NY, USA; NASA, Langley Research Cent, Hampton, VA, USA; Coll of William & Mary, Computer Science Dep, Williamsburg, VA, USA

E.I. Conference No.: 10044

Source: Proceedings - Symposium on Reliability in Distributed Software and Database Systems 6th. Publ by IEEE, New York, NY, USA. Available from IEEE Service Cent (Cat n 87CH2411-7), Piscataway, NJ, USA p 149-160

Publication Year: 1987

CODEN: PRDSEJ ISBN: 0-8186-0737-8

Language: English

Document Type: PA; (Conference Paper)

Journal Announcement: 8709

Abstract: Software-implemented fault masking in distributed systems requires the generation of at least three copies of all processes and the insertion of majority voters at each interprocess communication between process triples. If the semantics of the receive operator used by the receiver triple indicates waiting for the receipt of messages coming from different sender triples in an indeterministic order, different sequences of message processing by the processes of the receiver triple have to be avoided by execution of an agreement protocol. A protocol is presented to solve the problem of both fault masking and sequence agreement simultaneously, in order to reduce communication overhead with respect to message number as well as message length. The concept of fault masking is a slight modification of an m-protocol that supports sequence agreement by the generation of at least two sender-specific encoded signatures and by execution of acknowledgement and sequence agreement jointly using the same messages. A general classification of voting problems shows that sequence agreement does not require usual protocols for interactive consistency, even in the case of Byzantine faults. This permits a simple fault-detecting centralized solution for sequence agreement. 45 refs.

23/7/11 (Item 1 from file: 35)

760471 ORDER NO: AAD81-23996

A SPECIFICATION AND PROOF TECHNIQUE FOR MESSAGE-BASED SYSTEMS AND ITS APPLICATION TO DISTRIBUTED DATABASE ALGORITHMS

Author: NIGAM, ANIL

Degree: PH.D.

Year: 1981

Corporate Source/Institution: THE UNIVERSITY OF ROCHESTER (0188)

Source: VOLUME 42/05-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 1948. 279 PAGES

Distributed computing with widely separated machines is an area of

growing theoretical and practical interest. A distributed algorithm is abstracted as a collection of processes that communicate exclusively through message passing. Each participating process is specific as an abstract state-transition table. State transitions are affected by trigger enabling. Several types of trigger enabling events are considered viz. reception of a message, satisfaction of a local predicate, combination of message reception and predicate satisfaction, and spontaneous internal activation (also referred to as NULL trigger). Associated with the state transitions may be actions that the process executes upon transition triggering. These actions could involve transmission of a message, manipulation of local information or invocation of lower level tables. A proof method is developed for establishing that tables, or collections of tables, satisfy certain behavioral characteristics. Concepts of events and event ordering relations are extensively used in the proofs. The proofs are built upon axioms that characterize the behavior of the underlying interprocess communication facility. The abstract states in the tables are carefully designed so as to reduce the complexity of the proofs; essentially process state information that is not relevant to a proof is not encoded as abstract table state. An attractive and distinguishing feature of our approach is that the abstract state table specification is natural for developing programs as well as for writing proofs.

Various kinds of failures, relevant to distributed algorithms are discussed. An incremental design approach is demonstrated for extending tables to encode failure and recovery components. Proofs for these extended tables are also developed; some axioms characterizing process failure and recovery are proposed and validated.

The specification technique is applied to several variations of the popular Two-Phase Commit Protocol for atomic updates in a distributed database. Proofs are developed for the relevant properties, and failure and recovery aspects are also addressed. Finally some directions are provided about the applicability of the specification technique to database algorithms.

?ds

| Set | Items  | Description            |
|-----|--------|------------------------|
| S1  | 72925  | ENCOD?                 |
| S2  | 64601  | DECOD?                 |
| S3  | 162547 | REMOTE                 |
| S4  | 1311   | PROXY                  |
| S5  | 12056  | S1 AND S2              |
| S6  | 505    | S3 AND S5              |
| S7  | 0      | S4 AND S5              |
| S8  | 17     | S3 AND S4              |
| S9  | 16     | RD S8 (unique items)   |
| S10 | 242619 | OBJECT? ?              |
| S11 | 30     | S6 AND S10             |
| S12 | 30     | S11 NOT S9             |
| S13 | 30     | RD S12 (unique items)  |
| S14 | 27     | S13 NOT PY=1992:1993   |
| S15 | 3627   | INTERPROCESS?          |
| S16 | 4010   | S15 OR INTER() PROCESS |
| S17 | 197835 | S1 OR TRANSLAT?        |
| S18 | 83     | S16 AND S17            |
| S19 | 184571 | DISTRIBUTED            |
| S20 | 22     | S18 AND S19            |
| S21 | 16     | RD S20 (unique items)  |
| S22 | 16     | S21 NOT (S9 OR S14)    |
| S23 | 11     | S22 NOT PY=1992:1993   |

?s s4 and s16

1311 S4  
4010 S16  
S24 0 S4 AND S16  
?s s10 and s18  
242619 S10  
83 S18  
S25 5 S10 AND S18  
?s s25 not s20  
5 S25  
22 S20  
S26 3 S25 NOT S20

?rd s26  
>>>Duplicate detection is not supported for File 350.  
>>>Duplicate detection is not supported for File 351.

>>>Records from unsupported files will be retained in the RD set.  
...completed examining records  
S27 3 RD S26 (unique items)

?t 27/7/1-3

27/7/1 (Item 1 from file: 6)

901872 NTIS Accession Number: N82-17894/8

Some Thoughts on a Tuple Oriented Programming System

Verhelst, P.

Mathematisch Centrum, Amsterdam (Netherlands).

Corp. Source Codes: 017407000; S2885898

Sponsor: National Aeronautics and Space Administration, Washington, DC.

Report No.: MC-IW-174/81

Aug 81 17p

Languages: English

Journal Announcement: GRAI8213; STAR2008

NTIS Prices: PC A02/MF A01

Country of Publication: Netherlands

The system is intended to be used as the lowest level of an interactive programming system. It is shown how abstract data types and syntax extensions may be handled in this system. A basic framework that supports the definition and manipulation of arbitrary types of objects (including programs) is presented. In the same way as is done in LISP, a translation from programs to tuples is made. The tuple processor executes these translated programs. The tuple form of programs allows manipulation of programs and, by mapping the processor state on tuples, program debugging. By defining all types of objects within this framework, the corresponding operations are automatically available in the programming language.

27/7/2 (Item 1 from file: 8)

00926364 E.I. Monthly No: EI8006042910 E.I. Yearly No: EI80015414

Title: INTERNETWORK MESSAGE STRUCTURE.

Author: Postel, Jonathan B.

Corporate Source: Univ of South Calif, Los Angeles

Source: Data Commun Symp, 6th, Pacific Grove, Calif, Nov 27-29 1979 Publ by IEEE (Cat n 79CH1405-0 CSCB/C), New York, NY and ACM, Baltimore, Md, 1979 p 1-7

Publication Year: 1979

Language: ENGLISH

Journal Announcement: 8006

Abstract: The outlines of an Internetwork computer message system are presented. The system uses type-encoded data elements to represent message objects which are organized into list structures. Messages formatted in this way may be transmitted between Message Processing Modules (MPMs) using a variety of underlying interprocess communication systems. It is claimed

that the typed and structured format is better suited for the provision of message capabilities beyond plain text. The inclusion of Facsimile, Graphics, and Speech information in messages will be important in the near future. This system provides a framework for the development of advanced message system features such as enciphering, accounting, and routing. 6 refs.

27/7/3 (Item 1 from file: 35)

01213926 ORDER NO: AADMM-59053

MLOG TO ADA TRANSFORMATIONS

Author: STANCZYK, CHRISTINE M.

Degree: M.SC.

Year: 1989

Corporate Source/Institution: CARLETON UNIVERSITY (CANADA) (0040)

Source: VOLUME 30/02 of MASTERS ABSTRACTS.

PAGE 330. 205 PAGES

ISBN: 0-315-59053-X

This thesis investigates the use of MLog as a rapid prototyping language for Ada systems. MLog is a language designed to take advantage of object-oriented and declarative programming techniques. Additionally, a powerful set of inter-process communication (IPC) primitives is provided to support concurrent programming.

A cohesive set of transformations is presented that allow the translation of a substantial portion of the MLog language into Ada. The transformation process occurs in two steps: (1) pretranslation processing where the MLog code is annotated/restructured and (2) translation processing where the transformations are applied to the annotated code. The transformations maintain equivalent functionality; no attempt is made to maintain the object-oriented, declarative and IPC characteristics of MLog in the Ada code.

? 0.586 Hrs.

SYSTEM:OS - DIALOG OneSearch

File 237:BUYER'S GUIDE TO MICRO SOFTWARE(SOFT) JUN 93  
(c) 1993 ONLINE Inc.

File 256:Business Software Database(TM) 1993/Jul  
(c) 1993 Info. Sources Inc.

File 278:Microcomputer Software Guide 1993/Aug  
(c) 1993 R. R. Bowker Co.

File 751:Datapro Software Directory 1993/Jun  
(c) 1993 McGraw-Hill, Inc.

\*\* For an online bluesheet, enter HELP NEWS751. \*\*

File 233:MICROCOMPUTER INDEX(TM) 1981-1993/Jul  
(c) 1993 Learned Info. Inc.

File 275:COMPUTER DATABASE 1983-1993/AUG W4  
(COPR.1993 IAC)

| Set | Items | Description |
|-----|-------|-------------|
|-----|-------|-------------|

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?ds

| Set | Items | Description |
|-----|-------|-------------|
| S1  | 260   | PROXY       |
| S2  | 15476 | REMOTE      |
| S3  | 22    | S1 AND S2   |
| S4  | 23653 | OBJECT? ?   |
| S5  | 2     | S3 AND S4   |

?t 5/7/1-2

5/7/1 (Item 1 from file: 256)  
00036185

DOCUMENT TYPE: Review

PRODUCT NAMES: Remote Network Monitoring (RMON) MIB (830443)

TITLE: The RMON MIB -- A New Standard for Remote Monitoring of Networks

Hoerth, Mark

Communication & Computer News, v3 n3 p25(2) Mar 1992

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

Remote monitoring management information base (RMON MIB) uses SNMP and standard management information base (MIB) design to provide multivendor network interoperability, it allows network monitoring, fault diagnosis, planning and performance tuning. RMON MIB has six key benefits: comprehensive monitoring; multivendor interoperability; extended management; proxy management; extensibility; resource identification; allocation. RMON MIB is comprised of nine groups, and in order for a product to be MIB compliant, the vendor chooses a group and complies with all objects of that group. The author also discusses: MIB; difficulties with SNMP; RMON MIB; functional organization; future of RMON MIB.

5/7/2 (Item 1 from file: 275).

10426492 DATABASE: CD FILE 275

TITLE: Solving the SNMP manager puzzle. (how to buy the best Simple Network Management Protocol-based manager and get it to work) (special report: local area network management) (tutorial)

AUTHOR: Stephenson, Peter

JOURNAL: LAN Magazine VOL.: v6 ISSUE: n3 PAGINATION: p55(6)

PUBLICATION DATE: March, 1991

ARTICLE TYPE: tutorial

SOURCE FILE: CD File 275

ABSTRACT: Simple Network Management Protocol (SNMP) is a promising step in the direction of the network manager's dream of being able to manage huge, heterogeneous networks from one site with ease and efficiency. SNMP, which evolved from the Internet and TCP/IP worlds, is a scheme for communicating network management data over a local area network to a single site, called a Network Management Station. Under SNMP, each network segment must have a device, called an agent, that can monitor devices in that segment and report the information to the Network Management Station. Devices that cannot speak SNMP must be linked to the Network Management Station via a proxy agent. The Management Information Base (MIB) is a collection of objects that the SNMP uses to send management commands and information over the network.

?s network?

S6 142924 NETWORK?

?s s1 and s6

260 S1

142924 S6

S7 80 S1 AND S6

?s s4 and s7

23653 S4

80 S7

S8 10 S4 AND S7

?s s8 not s5

10 S8

2 S5

S9 8 S8 NOT S5

?t 9/7/1-8

9/7/1 (Item 1 from file: 256)  
01286745 DOCUMENT TYPE: Directory

PRODUCT NAME: Auditor Plus (286745)

Braintree Technology Inc  
62 Accord Park Dr  
Norwell, MA 02061  
(617) 982-0200

CONTACT: Lilly Pres, R Stephen

Auditor Plus is a security management and auditing system for system/security managers and auditors. It examines, reports on and optionally corrects security-related objects of a Digital VAX/VMS system and can identify and correct existing and potential security loopholes. The program can be used interactively, across a network and in batch. It includes a facility to re-schedule jobs for periodic checking and reporting. In the General Audit, users decide which of 35 audits to perform and report including information on passwords, user accounts, disks, VMS environment, security events, queues, VMS accounts, proxy accounts, system files, user UFDs and bad files. The software incorporates a security grid which allows users to select one of three possible security classifications (low, medium or high). Using the Master Audit, various system-wide audits and checks can be performed for a number of categories such as usernames, passwords, disks, queues, etc. for the current level, enabling users to instantly see where their efforts are most needed to bring about improvements in system security. 512K RAM required

9/7/2 (Item 2 from file: 256)  
00037831 DOCUMENT TYPE: Review

PRODUCT NAMES: OS/EYE\*NODE (389609)

TITLE: Reston Firm Keeps 'Eye' on OS Network Management

Inge, Jane A.  
Computer Digest, v7 n3 p36(2) Jun 1992  
REVIEW TYPE: Product Analysis  
GRADE: Product Analysis, No Rating

OS/EYE\*NODE, which supports networked UNIX and MS-DOS systems, is an integrated network, system, and application management package that crosses TCP/IP and OSI protocols. It is described by the developers as the only open systems object manager offering unified control, monitoring, and analysis for SNMP and CMIP/CMIS. Distributed application control, SNMP and CMIP proxy instrumentation, and management functions are supplied. The product will serve the federal government well, since it runs over EtherNet, token ring, X.25, or FDDI networks, supporting GOSIP X.400 directory services. This allows government customers to manage TCP/IP and OSI environments moving in the direction of GOSIP compliance.

9/7/3 (Item 1 from file: 233)  
0260169 90LT05-004

Third-parties jump on the SunNet Manager platform Modular design and support for standards are drawing many third-party vendors to Sun Microsystem's management platform ...

Yaro, Denis  
LAN Technology, May 1, 1990, v6 n5 p62, 65, 67-68, 4 Pages ISSN:

Profiles the SunNet Manager, a distributed workgroup computing product from Sun Microsystems of Mountain View, CA. The OSI Management Framework-based network management system runs on Sun's SPARC, 3/60 and 3/80 workstations. Says that the SunNet Manager features a set of libraries which combine the capabilities of an agent with the services rendered by a manager. Says also that the SunNet Manager includes proxy agents that manage objects from other protocols. Discusses the different methods in which management applications can be managed through SunNet. Enumerates applications contributed by third-party vendors supporting SunNet. Includes four diagrams and a sample display. (PAM)

9/7/4 (Item 2 from file: 233)

0199388 89DC08-005

TCP/IP network management with an eye toward OSI

Lew, H Kim; Robertson, Jim

Data Communications, August 1, 1989, v18 n10 p123-130, 6 Pages

ISSN: 0363-6399

Reports on a move by Internet to tackle the network management requirements of networks running TCP/IP. The Internet Activities Board (IAB) has recently adopted a network management strategy incorporating short- and long-term solutions both for its own purposes and for the progress of OSI network management standards. Presents an overview and states the objectives of TCP/IP's management method employing domains, objects, and object sets or 'classes', and features TCP and UDP, two transport protocols addressed by TCP/IP. Also presents other approaches suggested by competing organizations such as 'management by proxy' being reso to by the Netman Group. Includes four diagrams. (PAM)

9/7/5 (Item 1 from file: 275)

09779675 DATABASE: CD FILE 275

TITLE: Users turn to SNMP to fulfill dreams of simplicity. (Simple Network Management Protocol) (part of an editorial supplement on enterprise computing)

AUTHOR: Mardesich, Jodi

JOURNAL: InfoWorld VOL.: v13 ISSUE: n2 PAGINATION: pS9(2)

PUBLICATION DATE: Jan 14, 1991

SOURCE FILE: CD File 275

ABSTRACT: Arco Oil and Gas Co has a mixture of network systems and protocols. The company is considering centralized network management and is turning to Simple Network Management Protocol (SNMP) in hopes that a common protocol will simplify network management. SNMP was developed to manage TCP/IP networks, but can be implemented on other protocols. SNMP is widely used, but many observers feel the Common Management Information Protocol (CMIP) will eventually become the standard network management protocol. SNMP partially provides for four of the five components for network management defined by the International Standards organization (ISO): performance, fault, security, and configuration. Accounting has not been defined well enough in the Internet community. There are three parts to SNMP: managers; agents; and MIB, a database of manageable objects on a network. Security is considered a weak point.

9/7/6 (Item 2 from file: 275)

08766970 DATABASE: CD FILE 275

TITLE: Keep it simple; SNMP lets you manage a heterogeneous network today. (Simple Network Management Protocol; includes related article on a guide to the RFCs, request for comment)

AUTHOR: Schnaidt, Patricia

JOURNAL: LAN Magazine VOL.: v5 ISSUE: n7 PAGINATION: p82(8)

PUBLICATION DATE: July, 1990

SOURCE FILE: CD File 275

ABSTRACT: One solution to the crisis in network management, managing all the disparate components from the telecommunications to the computers and the local area network, is the Simple Network Management Protocol (SNMP). SNMP will reduce the number of different areas that need managing to just a few. Both managers and end users have chosen SNMP as their management protocol, causing the protocol to become widespread. Approximately 40 vendors are marketing products based on SNMP, including router manufacturers such as ACC, in Santa Barbara, CA, Cisco Systems, in Menlo Park, CA, and Wellfleet, in Bedford, MA. SNMP is a protocol that defines communication between the object being managed and the manager.

9/7/7 (Item 3 from file: 275)

08336270 DATABASE: CD FILE 275

TITLE: SMNP: bringing order to chaos. (Simple Network Management Protocol)

AUTHOR: Scott, Karyl

JOURNAL: Data Communications VOL.: v19 ISSUE: n4 PAGINATION: p24(4)

PUBLICATION DATE: March 21, 1990

SOURCE FILE: CD File 275

ABSTRACT: The Simple Network Management Protocol (SMNP) lets users maintain complex multivendor internetworks while reconfiguring devices on a regular basis and is rapidly becoming an industry standard. Virtually all vendors concerned with standardized network management have announced SNMP-based products. SNMP evolved from a public-domain concept created by computer scientists responsible for managing large research internetworks at universities. It requires both TCP/IP and user datagram protocol transports to carry data between the dedicated network management station and 'agent' stations. The protocol supports three basic command types: GET, which lets an NMS request data; SET, which allows the NMS to alter object values; and EVENT, which permits unsolicited messages from managed objects. It also provides proxy agent capabilities for non-SNMP nodes.

9/7/8 (Item 4 from file: 275)

08240094 DATABASE: CD FILE 275 \*Use Format 9 for FULL TEXT\*

TITLE: Keeping it simple. (Simple Network Management Protocol) (includes related article on message encoding)

AUTHOR: Case, J.; Davin, J.; Fedor, M.; Schoffstall, M.

JOURNAL: UNIX Review VOL.: v8 ISSUE: n3 PAGINATION: p60(8)

PUBLICATION DATE: March, 1990

AVAILABILITY: FULL TEXT Online LINE COUNT: 00298

SOURCE FILE: CD File 275

ABSTRACT: The Simple Network Management Protocol (SNMP) attempts to address the monitoring and controlling of Transmission Control Protocol/Internet Protocol (TCP/IP) Unix internetworks. SNMP uses an architecture defined primarily by network elements and protocol layering and is a shared protocol. It organizes managed information objects hierarchically as a global tree, with each object assigned a unique identifier. Protocol 'messages' handle the communication of management information among entities. SNMP provides five message types, including four request/response messages and an unsolicited 'trap' message used for polling. Applications of SNMP include network operations centers and proxy management of networks that do not support the protocol. Standards committees are working to improve the authentication of SMNP product development, and public-domain implementations are expected in the future.

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File 351:DERWENT WORLD PATENTS INDEX-LATEST

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S2 1155255 OBJECT? OR ENCOD? OR TRANSLAT? OR COMMUNICAT?

S3 15 S1 AND S2

S4 13 RD S3 (unique items)

S5 12 S4 NOT PY=1992:1993

?t 5/7/1-12

5/7/1 (Item 1 from file: 2)

4462942 INSPEC Abstract Number: B9309-6210C-014, C9309-6150N-027

Title: Management by proxy agent

Author(s): Reasoner, S.R.

Author Affiliation: Hewlett-Packard, Cupertino, CA, USA

Conference Title: Wescon Conference Record p.190-5

Publisher: Electron. Conventions Manage, Los Angeles, CA, USA

Publication Date: 1991 Country of Publication: USA xvi+602 pp.

Conference Sponsor: IEEE; ERA

Conference Date: 19-21 Nov. 1991 Conference Location: San Francisco, CA, USA

Availability: Western Periodicals Company, 424 East Main Street, Ventura, CA 93001, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Theoretical (T)

Abstract: There are many situations where management of network elements by standard and de facto standard protocols like Common Management

Information Protocol (CMIP) and Simple Network Management Protocol (SNMP) is not feasible. For instance, many existing network management solutions utilize proprietary network management protocols. There are also situations where the managed objects cannot support even the relatively lightweight SNMP protocol. The paper explores an alternative to reimplementing existing proprietary network management solutions or to implementing CMIP or SNMP on low end network devices. Instead of using CMIP or SNMP directly, a proxy agent is used which receives requests from a CMIP or SNMP manager and translates the request to the management protocol supported by the network device. The design of a proxy agent which supports CMIP is presented. (2 Refs)

5/7/2 (Item 2 from file: 2)  
03494397 INSPEC Abstract Number: C89068231 ~~1~~  
Title: Object monitor for a distributed object-oriented system  
Author(s): Valot, C.  
Issued by: Inst. Nat. Recherche Inf. Autom., Le Chesnay, France  
Publication Date: March 1989 Country of Publication: France 25 pp.  
Report Number: 985  
Language: French Document Type: Report (RP)  
Treatment: Practical (P)  
Abstract: SOS is a general-purpose, object-oriented distributed operating system allowing the execution of distributed applications of different kinds. The SOS operating system is object-oriented and based on the Proxy Principle. Entities are encapsulated and accessible by well-defined interfaces. The object monitor is in charge of observing the objects life and evolution within address spaces. The goal was to ease debugging of SOS programs. The construction of this tool has highlighted some problems of the SOS operating system. (19 Refs)

5/7/3 (Item 3 from file: 2)  
03265904 INSPEC Abstract Number: C89003647  
Title: A distributed implementation of flat GHC on the Multi-PSI  
Author(s): Ichiyoshi, N.; Miyazaki, T.; Taki, K.  
Author Affiliation: ICOT, Tokyo, Japan  
Conference Title: Logic Programming. Proceedings of the Fourth International Conference p.257-75 vol.1  
Editor(s): Lassez, J.-L.  
Publisher: MIT Press, Cambridge, MA, USA  
Publication Date: 1987 Country of Publication: USA 2 vol. xiv+1056 pp.  
ISBN: 0 262 12125 5  
Conference Sponsor: Dept. Ind., Technol. & Resources; BBJ Comput. Int.; Elsxi Australia; Intelligent Syst. Res  
Conference Date: 25-29 May 1987 Conference Location: Parkville, Vic., Australia  
Language: English Document Type: Conference Paper (PA)  
Treatment: Practical (P)  
Abstract: The authors have implemented the parallel logic programming language flat guarded Horn clauses (FGHC) on the Multi-PSI machine, which is a collection of Personal Sequential Inference Machines (PSIs) interconnected by a fast communication network. FGHC goals are distributed among the PSI machines to be executed ~~in~~ parallel. The key to the implementation are the introduction of the 'proxy and foster-parent' scheme and the development of an inter-processor communication protocol to avoid racing between simultaneous operations on the distributed AND-tree. The objective is to test a parallel implementation of FGHC and to develop basic and application software. (10 Refs)

5/7/4 (Item 4 from file: 2)

03252748 INSPEC Abstract Number: B88073565, C88063586

Title: Interconnecting OSI and non-OSI networks using an integrated directory service

Author(s): Zatti, S.; Janson, P.

Author Affiliation: IBM Res. Div., Zurich Res. Lab., Ruschlikon, Switzerland

Journal: Computer Networks and ISDN Systems vol.15, no.4 p.269-83

Publication Date: Sept. 1988 Country of Publication: Netherlands

CODEN: CNISE9 ISSN: 0376-5075

U.S. Copyright Clearance Center Code: 0376-5075/88/\$3.50

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: The emergence of OSI as an international standard is fostering a desire to interconnect existing networks and network architectures to OSI. In order to achieve this, a global scheme is necessary to provide object identification, and specific solutions are needed to provide internetwork addressability between applications. A structured naming level can be built on top of existing application program interfaces, and the necessary internetwork addressing and directory query capabilities can be provided by an application-level gateway. The address mechanism on the gateway maps local proxies into foreign addresses; the originality of the scheme is that proxies are built dynamically during internetwork directory calls, thus overcoming the typical problems of proxy schemes. The functions at the gateway can be organized into a base and option set structure, and be implemented up to the desired level of sophistication. The design presented is modular, and provides hooks for possible future evolutions of network architectures. (40 Refs)

5/7/5 (Item 5 from file: 2)

03218350 INSPEC Abstract Number: B88059457, C88052688

Title: SOS object - oriented communication service

Author(s): Makpangou, M.; Shapiro, M.

Issued by: Inst. Nat. Recherche Inf. Autom., Le Chesnay, France

Publication Date: March 1988 Country of Publication: France 15 pp.

Report Number: 801

Language: English Document Type: Report (RP)

Treatment: Practical (P)

Abstract: SOS is a general-purpose, object-oriented distributed operating system, based on the proxy principle. The SOS Communication Service provides flexible communication mechanisms for executing distributed applications with conflicting requirements (e.g. multimedia document access, real-time voice transfer, moving image, and reliable office activities), especially with respect to the speed/reliability trade-off. These mechanisms must be efficient enough to encourage development of distributed applications. Furthermore, each application should only pay the price of those mechanisms it really uses. The SOS Communication Service provides both reliable and unreliable communication; unreliable communication incurs no reliability-related overhead. Both unicast and multicast communication are provided. All of these are multiplexed on a single host-to-host transport channel. The object-oriented design allows progressive construction of the invocation-level protocols, with extensive re-use of code and design. (15 Refs)

5/7/6 (Item 6 from file: 2)

02610645 INSPEC Abstract Number: B86016909, C86011204

Title: Authentication and discretionary access control in computer networks

Author(s): Karger, P.A.

Author Affiliation: Digital Equipment Corp., Secure Syst. Group, Littleton, MA, USA

Journal: Computer Networks and ISDN Systems vol.10, no.1 p.27-37

Publication Date: Aug. 1985 Country of Publication: Netherlands

CODEN: CNISE9 ISSN: 0169-7552

U.S. Copyright Clearance Center Code: 0376-5075/85/\$3.30

Language: English Document Type: Journal Paper (JP)

Treatment: General, Review (G)

Abstract: Proposes a new mechanism for authentication and discretionary access control in networks with decentralized control. Girling's strategy for one-time keywords for authentication forwarding is combined with a proxy login mechanism to obtain a reliable method for network authentication that does not depend on the transmission of passwords. The authentication mechanism is used as the basis for a scheme for network-wide access control lists allowing a user to grant access rights to any other user in a network. These proposals are described in the context of the Digital Network Architecture (DNA), but are in fact applicable to any packet switched network. (25 Refs)

5/7/7 (Item 7 from file: 2)

02257815 INSPEC Abstract Number: B84032384, C84027716

Title: VAX/VMS DECnet Proxy Access

Author(s): Perron, N.

Author Affiliation: TRW Defense Systems Group, Redondo Beach, CA, USA

Journal: DEC Professional vol.3, no.1 p.146-8

Publication Date: Jan. 1984 Country of Publication: USA

CODEN: DECPDJ ISSN: 0744-9216

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: Digital realized DECnet access was inefficient and enhanced this software to avoid these two problems. This enhancement is called Proxy Access. With Proxy Access, if someone were to issue the command: \$COPY FILE.EXT NODEX:: the file FILE.EXT would be copied directly to NODEX in the directory specified by the network manager, with the UIC and file protection codes established for that user. Proxy Access provides the user with the advantages of security, efficiency and control. (0 Refs)

5/7/8 (Item 8 from file: 2)

00986544 INSPEC Abstract Number: C76029924

Title: A method to simplify network representation in transportation planning

Author(s): Chan, Y.

Author Affiliation: Pennsylvania State Univ., University Park, PA, USA

Journal: Transportation Research vol.10, no.3 p.179-91

Publication Date: June 1976 Country of Publication: UK

CODEN: TRREBK ISSN: 0041-1647

Language: English Document Type: Journal Paper (JP)

Treatment: Theoretical (T)

Abstract: The problem of network aggregation is defined as the simplification of the number of nodes and links in a transportation network. The objective of a network aggregation technique is to reproduce the level-of-service attributes (such as travel time) between any two points using a spider network as a proxy for the detailed. The aggregation procedure categorizes links into functional groups such as access, egress, line-haul, by-pass and intrazonal circulation-which is a convenient classification in terms of transportation analysis. The technique presented has several distinguishing advantages. Certain invariance properties are maintained-for example the total trip miles of travel is the same whether measured in the aggregate or detailed networks. (15 Refs)

5/7/9 (Item 1 from file: 6)

680336 NTIS Accession Number: AD-A059 409/3

Informant Accuracy in Social Network Data IV, or A Comparison of Clique-level Structure in Behavioral and Cognitive Network Data

(Interim rept.)

Bernard, H. Russell ; Killworth, Peter D. ; Sailer, Lee

West Virginia Univ Morgantown

Corp. Source Codes: 374100

Report No.: BK-116-78

Aug 78 54p

Languages: English

Journal Announcement: GRAI7902

Prepared in cooperation with Cambridge Univ. (England) and Northwestern Univ., Evanston, IL.

NTIS Prices: PC A04/MF A01

Contract No.: N000014-75-C-0441

This paper examines whether clique structure in cognitive data, (i.e. recall of who one talks to ) may be used as a proxy for clique structure in behavioral data (i.e., who one actually talks to ). The answer to this question is crucial to much of sociometric and social net-theoretic studies of social structure. We analyzed the clique structures of the communication patterns of four naturally-occurring groups of sizes 34 to 58, whose actual communications could easily be monitored, together with the groups' perceptions of their communications. The groups used were: radio hams, a college fraternity, a group of office workers, and an academic department. The analysis used clique-finding, block-modeling, and factor analytic techniques, all employed in such a way as to maximize the accuracy of the cognitive data. After defining a way to compare clique structures between behavioral and cognitive data, we found that there was no useful relationship between the two, and furthermore there was no significant difference in performance between any of the structure-finding algorithms. We conclude that cognitive data may not be used for drawing any conclusions about behavioral social structure. (Author)

5/7/10 (Item 1 from file: 35)

01287293 ORDER NO: AADMM-70959

HANDYMAN: A MULTIUSER PUPPETEERING SYSTEM FOR COMPUTER GRAPHICS MOTION CONTROL

Author: SMITH, ALEXANDER G. M.

Degree: M.C.S.

Year: 1991

Corporate Source/Institution: CARLETON UNIVERSITY (CANADA) (0040)

Source: VOLUME 31/02 of MASTERS ABSTRACTS.

PAGE 836. 80 PAGES

ISBN: 0-315-70959-6

This thesis is concerned with the design and implementation of a system called "Handyman" for controlling the motion of three dimensional objects in a computer graphics environment. Handyman records, combines, and edits the real-time motions specified by human puppeteers operating controls concurrently at multiple workstations. Handyman provides simple computer graphic renderings during recording and more detailed ones for final off-line production.

The thesis describes three areas of Handyman in detail. One area is the configuration wiring diagram that ties together simple physical modeling, multiple live user inputs and pre-recorded motion into a complete performance. Another is the graphics structure that features some extensions to the conventional directed acyclic graph for increased representational power and speedy caching. The last area discusses the low level networking protocol and the networked Smalltalk proxy object system built upon it.

5/7/11 (Item 2 from file: 35)

01141656 ORDER NO: AAD91-03292

PERSUASION AND TECHNOLOGY: A RHETORICAL CRITICISM OF NEW RIGHT DIRECT MAIL APPEALS

Author: CHRISTIANSEN, ADRIENNE ELIZABETH

Degree: PH.D.

Year: 1990

Corporate Source/Institution: UNIVERSITY OF MINNESOTA (0130)

Adviser: ROBERT L. SCOTT

Source: VOLUME 51/09-A OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 2922. 313 PAGES

This study analyzed and rhetorically criticized 320 direct mail letters produced by four politically conservative organizations: Conservative Caucus, Committee for the Survival of a Free Congress, Concerned Women for America and the Moral Majority. The purpose of the research was to determine what rhetorical functions direct mail served in the New Right social movement. I employed Herbert Simons' "requirements, problems, and strategies" theory of social movements, as well as Aaron Gresson's theory of protest groups and "consensus renegotiation."

The study illuminated three main findings. First, direct mail successfully fulfilled two needs of the New Right social movement--finding potential supporters and raising funds. It had limited success in fulfilling other requirements of social movements, such as serving as a communication network, organizing local chapters and events, and transforming letter recipients into agents of change. The analysis suggested that although direct mail did not meet most traditional social movement needs, the medium did help the New Right "business" offer low-cost political services to disenfranchised Americans. In this way, the New Right was able to establish a kind of social movement by proxy.

The second finding concerned the degree to which New Right direct mail empowered letter recipients. Contributing money through direct mail was a powerful political action, but it did not give people the means to keep acting as independent agents. Instead, direct mail kept recipients dependent on the organizations for information, emotional support and policy directions. Because the medium claimed to give influence, access and a political voice to unhappy and unrepresented Americans, I argued that direct mail ultimately failed to empower those it claimed to help.

Third, the study demonstrated that direct mail's rhetorical strategies were highly successful in establishing group identification and a protest group language. But direct mail arguments and strategies were not adapted to the changing rhetorical situation faced by the New Right, and therefore were incapable of rhetorically reintegrating with the larger culture. I suggested that this incapacity played a prominent role in the demise of direct mail and in the demise of the New Right social movement.

5/7/12 (Item 3 from file: 35)

01124060 ORDER NO: AAD90-27230

PROXY: A PROCESS-ORIENTED EXTENSIBLE HYPERTEXT ARCHITECTURE

Author: KACMAR, CHARLES JOHN

Degree: PH.D.

Year: 1990

Corporate Source/Institution: TEXAS A&M UNIVERSITY (0803)

Chair: JOHN J. LEGGETT

Source: VOLUME 51/05-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 2459. 150 PAGES

This research describes a new architecture for hypertext environments. The architecture merges the process, object-oriented, and hypertext models to provide hypertext services to object-based, distributed, application

components. Through this architecture, applications are integrated to form a comprehensive hypertext computing environment, allowing links to connect applications or objects in different applications.

The architecture separates hypertext and application functionality so that multiple applications can use the facilities of a common hypertext layer. The design of the architecture is such that components can be extended or tailored in order to support future applications, multimedia objects, or the needs of specific applications or users. The process-based, object-oriented framework allows objects of arbitrary complexity to live and interact in a hypertext world. Additionally, the protocol and facilities which support component interaction provide location transparency, arbitrary object granularity, and parallel computation over a network.

This dissertation provides a conceptual model of hypertext and a general architecture for hypertext system construction. Related literature from object-oriented programming, operating systems, multimedia applications, and database is discussed in terms of the architecture. A hypertext data model, computational model, and hypertext system taxonomy are used to discuss the capabilities of current hypertext systems. Interaction scenarios are provided in order to illustrate object interaction and the distribution of work among the components of the architecture. A prototype system, implemented to demonstrate the feasibility of the architecture, is discussed. The prototype illustrates all aspects of the architecture including distributed application and hypertext components, cross-application linking, and anchors acting as proxy objects for applications. Application scenarios, problems and limitations, and future research issues provide an understanding of the power of the architecture and its potential for impacting the design of next-generation hypertext systems.

?

Language: English

Document Type: JA; (Journal Article) Treatment Code: A; (Applications); T; (Theoretical)

Abstract: Distributed operating systems (where 'distributed' implies distribution of functionality and control) are generally said to be of two types: DOS/RPC (Remote Procedure Call) and DOS/MP (Message Passing). While variants of these two abound, no strong third alternative is seen today. For the loosely-coupled architecture, RPC at a greater depth reduces to message passing. It is thus of fundamental importance to fully explore and exploit the paradigm of message passing. This article attempts to give a brief but encompassing overview of distributed message passing operating systems.

(Edited author abstract) 26 Refs.

Descriptors: \*COMPUTER OPERATING SYSTEMS--\*Design; COMPUTERS, DIGITAL--Data Communication Systems; COMPUTER SYSTEMS, DIGITAL--Distributed

Identifiers: MESSAGE PASSING OPERATING SYSTEMS; DISTRIBUTED OPERATING SYSTEMS  
EI Classification Codes: 722 (Computer Hardware); 723 (Computer Software)

1 33 Records with Word/Phrase Index of "MESSAGE PASSING" or "MESSAGE PASSING ALGORITHM" or "MESSAGE PASSING COMPUTERS" or "MESSAGE PASSING LANGUAGE....

1 33 Records with Word/Phrase Index of "MESSAGE PASSING" or "MESSAGE PASSING ALGORITHM" or "MESSAGE PASSING COMPUTERS" or "MESSAGE PASSING LANGUAGE....

1 33 Records with Word/Phrase Index of "MESSAGE PASSING" or "MESSAGE PASSING ALGORITHM" or "MESSAGE PASSING COMPUTERS" or "MESSAGE PASSING LANGUAGE....

1 33 Records with Word/Phrase Index of "MESSAGE PASSING" or "MESSAGE PASSING ALGORITHM" or "MESSAGE PASSING COMPUTERS" or "MESSAGE PASSING LANGUAGE....

1 50 Records with Word/Phrase Index of "MESSAGE PASSING" or "MESSAGE PASSING COMPUTERS" or "MESSAGE PASSING MODEL" or "MESSAGE PASSING PROTOCOLS" o....

1 50 Records with Word/Phrase Index of "MESSAGE PASSING" or "MESSAGE PASSING COMPUTERS" or "MESSAGE PASSING MODEL" or "MESSAGE PASSING PROTOCOLS" o....

1 39 Records with Word/Phrase Index of "MESSAGE ROUTING PROTOCOLS" or "MESSAGE ROUTING SCHEMES" or "MESSAGE SOFTWARE SYSTEM" or "MESSAGE STR....

1 4 Records with Word/Phrase Index of PROXY

1 2 Records with Word/Phrase Index of "DISTRIBUTED MESSAGE PASSING COMPUTATION" or "DISTRIBUTED MESSAGING"

1 2 Records with Word/Phrase Index of "INTER-PROCESS COMMUNICATION" or "INTER-PROCESS COMMUNICATION (IPC)"

1 9 Records with Word/Phrase Index of "SMALLTALK 80" or "SMALLTALK COMPUTER LANGUAGE" or "SMALLTALK ENVIRONMENT" or "SMALLTALK-80"

1 4 Records with Word/Phrase Index of "DISTRIBUTED MESSAGE-PASSING VIRTUAL MACHINE" or PROXY

1 33 Records with Word/Phrase Index of "MESSAGE PASSING" or "MESSAGE PASSING MODE" or "MESSAGE PROTOCOL FOR REMOTE TERMINAL UNITS" or "MESSAGE SEND....

1 33 Records with Word/Phrase Index of "MESSAGE PASSING" or "MESSAGE PASSING MODE" or "MESSAGE PROTOCOL FOR REMOTE TERMINAL UNITS" or "MESSAGE SEND....

1 6 Records with Word/Phrase Index of PROXY

1 6 Records with Word/Phrase Index of "INTER-PROCESS HANDLING" or "INTER-PROCESSOR COMMUNICATION" or "INTER-PROCESSOR COMMUNICATIONS" or....

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1 6 Records with Word/Phrase Index of "INTER-PROCESS HANDLING" or "INTER-PROCESSOR COMMUNICATION" or "INTER-PROCESSOR COMMUNICATIONS" or....

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30 of 33 Complete Record

DIALOG No: 02885757 EI Monthly No: EI9004039261

Title: Distributed message passing operating systems.

Author: Chandras, Rajan G.

Corporate Source: Cent for Development of Advanced Computing, Pune, India

Source: Operating Systems Review (ACM) v 24 n 1 Jan 1990 p 7-17

Publication Year: 1990

CODEN: OSRED8 ISSN: 0163-5980

Language: English

Document Type: JA; (Journal Article) Treatment Code: A; (Applications); T; (Theoretical)

Abstract: Distributed operating systems (where 'distributed' implies distribution of functionality and control) are generally said to be of two types: DOS/RPC (Remote Procedure Call) and DOS/MP (Message Passing). While variants of these two abound, no strong third alternative is seen today. For the loosely-coupled architecture, RPC at a greater depth reduces to message passing. It is thus of fundamental importance to fully explore and exploit the paradigm of message passing. This article attempts to give a brief but encompassing overview of distributed message passing operating systems.

(Edited author abstract) 26 Refs.

Descriptors: \*COMPUTER OPERATING SYSTEMS--\*Design; COMPUTERS, DIGITAL--Data Communication Systems; COMPUTER SYSTEMS, DIGITAL--Distributed

Identifiers: MESSAGE PASSING OPERATING SYSTEMS; DISTRIBUTED OPERATING SYSTEMS

EI Classification Codes: 722 (Computer Hardware); 723 (Computer Software)

30 of 33 Complete Record

DIALOG No: 02885757 EI Monthly No: EI9004039261

Title: Distributed message passing operating systems.

Author: Chandras, Rajan G.

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Abstract: Distributed operating systems (where 'distributed' implies distribution of functionality and control) are generally said to be of two types: DOS/RPC (Remote Procedure Call) and DOS/MP (Message Passing). While variants of these two abound, no strong third alternative is seen today. For the loosely-coupled architecture, RPC at a greater depth reduces to message passing. It is thus of fundamental importance to fully explore and exploit the paradigm of message passing. This article attempts to give a brief but encompassing overview of distributed message passing operating systems.

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Descriptors: \*COMPUTER OPERATING SYSTEMS--\*Design; COMPUTERS, DIGITAL--Data Communication Systems; COMPUTER SYSTEMS, DIGITAL--Distributed

Identifiers: MESSAGE PASSING OPERATING SYSTEMS; DISTRIBUTED OPERATING SYSTEMS

EI Classification Codes: 722 (Computer Hardware); 723 (Computer Software)

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